A Clinical Lecture
ON THE
PHYSICAL EXAMINATION OF THE URETHRA IN CASES OF STRICTURE.

Delivered at University College Hospital on November 18th, 1875.

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(*Reported by* Mr. G. BUCKSTON BROWNE.)

GENTLEMEN,—To-day our subject is to be, stricture of the urethra. It naturally comes next in order; but I take it next also because it is generally supposed to be one of the most frequently occurring affections of the urinary organs. Not that it is so; on the contrary, it is certainly not present in a great majority of those who fancy they are the subjects of stricture. Many persons suffering from slight functional disturbance will come to consult you for "stricture." They do so because they find the stream a little twisted or forked, whilst nevertheless the urethra may be absolutely free from any organic change.

[After discussing the pathology and describing the symptoms of stricture, the lecturer proceeded to consider the mode of examining the urethra in order to ascertain the presence of stricture.]

For this purpose there are two separate modes to be followed, as there are two different objects to be attained, each of which is quite distinct from the other:—

There is, first, a simple examination of the urethra, to be used only for the purpose of verifying the presence or absence of any material deviation from the natural dilatability of the urethra;

And there is, secondly, a more minute and exact examination, in order to determine the precise condition of the urethra when it is already known, or there is reason to believe, that long-standing and perhaps considerable obstruction exists.

Now I need hardly say that the first examination is one which is applicable to the vast majority of cases; and that the second is necessary only in a few and exceptional cases. A very simple examination suffices to determine the question which so frequently comes before us—"Do certain not very considerable derangements of the urinary function in any particular patient arise from organic obstruction, and therefore require instrumental interference; or are they due to some other condition, for which instruments are not merely useless but would probably be injurious?"

Now, in reference to this subject, I find a tendency at the present day to employ instruments too readily, and instruments also which are liable to injure the urethra. This over-readiness to interfere with the urethra existed at the beginning of the present century. The mechanical school, as I shall take the liberty to term those who devise and largely employ more or less complex mechanical means for exploration, and for applying dilatation, cutting, or caustic to the unfortunate urethra, was then in the ascendant. I think I could amuse you for hours with the history of the surgical knick-knacks which have been produced by it. But our time is too valuable, and I will content myself with one illustration only of surgical practice in this country at the era I speak of. [Sir Henry Thompson then read some curious reported cases from the work of Sir E. Home, illustrating the extraordinary abuse of the bougie at that time.]

Following the period spoken of came the experience of mischief as its result, and a certain healthy reaction appears to have taken place. The practice of Sir Benjamin Brodie, who was subsequently so high an authority during his long career, was marked by caution and prudence, and his admirable teaching ensured a similar practice among others for some time. I may be allowed to say, perhaps, that my feeble voice has also been raised against the abuse of instruments from the first day that I ventured to pen a line on the subject, some two or three and twenty years ago. And now I perceive a growing disposition to return to the state of things I have referred to. I note an increased tendency to discover stricture, and especially to undertake a considerable amount of operative treatment for strictures of the slightest kind, and sometimes where, in my opinion, they do not exist. There seems now to be a school which has determined for itself a very high standard of patency in what we hear called the "urethral tube," and which is accordingly said to have, or, if it hasn't, that it ought to have, a calibre of so many parts, and very large parts, of an inch, or millimetres, as the case may be. Instruments of astounding magnitude are produced, and if one of them cannot be drawn, with an ease which contents the operator, through the whole of the urethra, the unlucky patient is pronounced to be the subject of stricture; and probably he is submitted to an operation by no means devoid of risk.

Now I don't know that this fashion has as yet been adopted here, but I do know that it exists elsewhere, and I raise my earnest protest against it. I feel it a matter of duty on my part to say what I think about treatment which I am perfectly certain neither you nor I would for a moment entertain the propriety of in our own proper persons; that is, if we entertain a due respect for that delicate passage which an intelligent acquaintance with it will ensure. Let us for a moment revert to the natural form which the urethra takes when it is distended by some fluid material, and observe how unlike it is to the coarse simile of a tube of known uniform diameter. We have already seen that its natural capability for dilatation varies greatly at different points: being much limited at the junction of the membranous and spongy portions; limited again, but less so, and somewhat irregularly, in the anterior part; and again at or near the meatus. Let me assure you also that there are few structures more delicate than the male urethra. Formed of an internal membrane of great tenuity, surrounded by elastic and muscular fibres, interpenetrated everywhere with ducts, fine blood-vessels, and nerves; the whole surrounded in front of the prostate with one of the most elaborate of vascular structures, known as erectile tissue; add to this the sensitiveness to pain of the internal membrane, equalling the conjunctiva in that quality, as anyone may learn for himself by passing the softest instrument he can find. Lastly, and more important still, it possesses another form of sensibility, of a much graver kind, which even the last-named membrane does not possess: I mean a strong tendency to arouse, in the entire nervous system, a state of excitement, evidenced by the striking phenomena of rigors and subsequent fever and prostration, when slight mechanical injury has been done to any portion of it. Now let this picture of the urethra as it is, never be absent from your mind's eye when you put an instrument into it, and both you and your patient will profit. When, therefore, a young man consults you for certain troubles relative to which you desire to learn whether urethral obstruction be a cause or not, do not be tempted for an instant to adopt so unnecessary a course (to say the least) as the introduction of very large instruments, or instruments with huge bulbs at the end of them. But simply take a flexible English gum-elastic bougie, well curved towards the point, with a blunt end (since a tapering point, of course, will not mark distinctly the site of stricture), not larger, as a rule, than No. 10 or 11 of our scale, and pass it very gently and slowly into the bladder. If it goes easily—above all, if it is withdrawn without being held, and slides out with perfect facility, take my word for it he has no stricture, and, *quoad* obstruction, wants no use of instruments whatever.

I dare say I shall be told by someone, that there may be a urethra through which No. 11 can be made to pass, yet which is, nevertheless, the subject of some degree of stricture which it is necessary to treat. Well, I do not deny the existence of that exceptional case. But such an example is very rare, and, further, no man who has the slightest delicacy of tactile sense in his fingers can fail to observe the difference between a No. 11 bougie sliding out with facility, and one which is grasped somewhat as it is withdrawn. This difference is always manifest in the two cases, and is, indeed, very notable. But supposing that the No. 11 stops at any point, and you have assured yourself that it is not one of the natural obstructions to the passage of an instrument through the urethra, of which I

shall have to speak hereafter, you will try a smaller instrument of the same kind until you have arrived at one which does pass through and inwards into the bladder. But you may also test your observation by passing a soft tapering French bougie—11 or 12 English size,—and if it is a *natural* obstacle which at first checked your blunt-pointed bougie, the former instrument will probably slip through without trouble.

Now, with reference to these bulbous-pointed flexible explorers, nothing is more easy, especially with an unpractised hand, than to deceive oneself with respect to the existence of stricture by means of them. If not drawn out accurately in the axis of the passage, you may feel a check, and readily find what you believe to be a stricture in the most healthy urethra. And that is precisely what I am so anxious to guard you against; for, in the hands of designing persons, these instruments may be turned to most unworthy purpose. For men outside the ranks of our profession, or holding a questionable position on its outskirts, these instruments are the very thing. That is an additional reason why we should be careful not to encourage their unnecessary use. I have used small bulbous instruments in metal for the diagnosis of narrow and confirmed stricture, on which it is desirable to operate, for twenty years, but for slight stricture never; and I have protested against their use on the two grounds already named: first, that for such the instrument inflicts needless pain; secondly, that it is liable to deceive a young operator not too adroit or familiar with its use.

But now, in the second case—not that of the young man, but of the patient who has a confirmed stricture,—the diagnosis has probably to be conducted with more attention to detail. I proceed as follows, making what may be called a "survey" of the passage. I commence by passing the soft, blunt-ended English gum-elastic bougie as far as it will go; and when this stops, as it may do within an inch or less of the orifice, I make a note of the distance, and next find what will pass with tolerable ease through the obstruction met with. Very likely a No. 4 or 5 (similar instrument to the preceding) will do so, and it may then be carried further to seek another check, which is not unfrequently met with at about five inches from the orifice. Through this, after a trial or two, a very small gum catheter—say No. 1 or 2—may probably be passed into the bladder, drawing off some urine, and so assuring you of its position. I know then the patient has, at all events, a narrowing near the orifice and another at the distance named. I may verify this at once with a bulbous instrument if I choose; but as long as the anterior narrowing exists, it is as well to postpone more minute research until it is divided, as considerable narrowing at that part always requires to be. Such a one, indeed, is never advantageously treated by dilatation. This being done, the No. 11 blunt-ended bougie is passed, and we learn whether any contraction exists in the interval existing between it and the spot originally marked at five inches. If there is one, the stopping of the bougie will indicate its situation. But if the bougie passes easily to the point just named, the canal is sufficiently open, and we have arrived at what, in ninety-nine cases out of a hundred, is the only remaining stricture; for it is rare indeed, where a narrow stricture exists at that distance from the meatus, that any other will be found beyond. This has next to be dealt with, and, as we are speaking now of old and confirmed cases, there is little doubt that the best treatment will be internal urethrotomy. How to accomplish that most perfectly will be discussed in my lecture on that subject.

A word or two about the bulbous exploring instrument. It should, in my opinion, be of polished metal mounted on a slender metal rod or shaft. No other material slides so easily and smoothly through the urethra; and the necessity for it is, after all, not great, so that to employ one which produces much irritation, passes roughly, or distends unnecessarily, is to pay too high a price for the small amount of information it may convey. I am free to say that, although I used the metal bulbous instruments in the earlier part of my career, I can now, with more experience, attain all that is necessary without them. It is said that they enable you to ascertain the length of a stricture. In reference to this, let me tell you, first, that considerable narrowing almost never affects the urethra for any great distance. The passage is often partially implicated for half an inch behind and half an inch before the maximum point of narrowing—an important practical point in relation to operation; but the very narrow spot, which is what the exploring bulb indicates, is almost invariably short, within a quarter of an inch in extent. Secondly, you must take into consideration the fact that the mobility of the mucous lining of the urethra will deceive you if you are not aware of it. A very little pressure in front, on entering the stricture, or from behind, in withdrawing the exploring bulb, if it comes rather tightly through, changes the situation of the contracted portion considerably in relation to its distance from the external meatus.

I repeat, then, if you have to deal with a recent stricture, such a one as you naturally intend to treat by dilatation, the introduction of a large bulbous explorer is wholly useless, only produces unnecessary pain, and tends to excite inflammation.

But in view of any internal incisions for a confirmed or obstinate case, the important thing is simply to know where the narrowed points of the urethra are, and then it is not difficult to apply your cutting instrument properly to them.

But, before proceeding further, I wish to show you the proper mode of passing an instrument through the healthy urethra into the bladder, so as to avoid error arising from certain sources of difficulty which are *naturally* found there, and are often mistaken for stricture. Were the urethra a mere tube of uniform diameter, these would not exist. We shall observe in the particulars of its unlikeness to a simple tube, that such natural obstacles do exist, and have to be avoided.

ON CHLORIDE OF LEAD AS A DEODORISER AND DISINFECTANT.

BY R. H. GOOLDEN, M.D.

I WISH to call the attention of medical practitioners and especially of sanitary officers, through THE LANCET, to the value of chloride of lead as the most powerful and economical agent for eliminating sulphide of hydrogen from the atmosphere, as well as from all organic matter in a state of decomposition or putridity. There is nothing new in this fact. It is known to all chemists, but its application has been practically disregarded, owing to the popularity of other deodorisers, which having been made the subjects of patents are well advertised, and therefore generally adopted, and they certainly do answer the purpose with more or less completeness. Of these I may instance—Chloride of zinc (Burnett's), chloride of aluminium, hypochlorite of soda (Marvel Fluid), hypochlorate of potassa, hypochlorate of lime, permanganate of potassa (Condy's), permanganate of lime, peroxide of iron, peroxide of manganese, powdered charcoal, bog earth, and alluvial earth.

I need not enter into the *rationale* of the chemical action of these several ingredients, nor do I suggest the substitution of chloride of lead for the three last-named substances when it is proposed to convert organic matter into reproductive soil for farming or gardening purposes, but only in those cases where it is necessary to purify a fetid atmosphere, which has to be breathed by living people.

It has already been objected that zinc and manganese have been detected in plants grown in soil manured by stable-dung, which had been deodorised by Burnett's and Condy's fluids. I do not know how far the fact has been established, but even the suggestion is of such importance as to make us very careful in proposing the use of lead, unless it can be shown that lead is not in the same category. I think we may arrive at a strong inductive probability that it is not so; for the lead sulphide is quite insoluble except in strong nitric acid, in boiling hydrochloric acid, and in aqua regia (which is not the case with zinc or manganese); nor is lead sulphide absorbed in the human body when swallowed, but passes on by the bowel as harmless as powdered charcoal; and the affinity of lead for sulphur is so strong that lead sulphide cannot be resolved but at a very high tempe-

rature. Another safeguard lies in the very sparing solubility of lead chloride, and also in the very small quantity used in the deodorising process.

The chloride of lead and sulphide of hydrogen react with a simultaneous double affinity, producing an insoluble lead sulphide and hydrochloric acid. Lead is so readily acted upon by sulphur, that metallic lead and oxide of lead in paint, even when protected by the dried oil, is turned black in any atmosphere where sulphide of hydrogen exists. White paint in stables, waterclosets, and in artists' paintings, is soon turned black by it and spoilt.

To prepare it for use, take, for ordinary purposes, half a drachm of nitrate of lead, dissolve it in a pint or more of boiling water—(nitrate of lead is a soluble salt, and very cheap; it may be had in any quantity for about a shilling a pound, and should be much cheaper if bought in large quantities),—and dissolve two drachms of common salt (chloride of sodium) in a pail or bucket of water; pour the two solutions together, and allow the sediment to subside. The clear supernatant fluid will be a saturated solution of chloride of lead. A cloth dipped in this solution and hung up in a room will sweeten a fetid atmosphere instantaneously, or the solution thrown down a sink, watercloset, or drain, or over a heap of dung or other refuse, will produce a like result. Even the tarnishing of gold and silver plate may be prevented by a rag dipped in the solution being hung up in the room or window where it is exposed.

It will thus be seen that one great advantage of chloride of lead over all other deodorisers lies in its great cheapness. The cost of the quantity of nitrate of lead required for use may be estimated at a fraction of a farthing; it is easily carried about, or may be sent by post; it is a dry solid, is not caustic, nor will it discolour or blister the skin; it can be kept in paper or a pill-box, and therefore does not require a glass or other fragile bottle. The exact equivalent proportion of nitrate of lead and chloride of sodium would be 100 to 317 in weight. As it is necessary that the whole of the nitrate of lead should be converted into chloride, a slight excess of salt is desirable, but as chloride of sodium in the solution renders the chloride of lead even less soluble than in water, I have adopted the weights respectively as half a drachm to two drachms—sufficiently correct for all practical purposes. 331 grains of nitrate of lead converted into lead chloride are sufficient for 34 grains of sulphide of hydrogen. Now 36·38 grains of sulphide of hydrogen represents 100 cubic inches—a quantity quite ten times larger than under ordinary circumstances we are likely to have to deal with.

In sick rooms, hospitals, and crowded assemblies, we have to deal with the sulphide of hydrogen and ammonium, given off by the resolution of organic, especially albuminous matter in decay, or eliminated from the living body in fæces through the skin and with the breath; and it must be borne in mind that whenever great numbers of people are crowded together in rooms, as in balls, concerts, theatres, or schoolrooms, the human body gives off an amount of sulphide of hydrogen, and that it is this, and not the carbonic acid, that makes people exposed to such an atmosphere so depressed, and which, when highly concentrated, developes typhus poison. The quantity is indeed very slight compared with its power of offensiveness, as in the analogous case of various flowers whose scent is most powerful, producing a sensible effect upon the human organism, and yet the agreeable or offensive matter composing it is too small to be detected by any test except the olfactory sense; and hence it is that the small quantity of lead chloride contained in the solution is found practically to be quite sufficient to sweeten the most offensive room, and, in my experience, to deodorise any drain, watercloset, or sink.

A not less important direction, in which the use of the chloride of lead would prove of the utmost value to H.M. navy and the mercantile marine, is for the purification of bilge-water, and of the close, fetid atmosphere between decks in emigrant and passenger ships; easy of transport, occupying little room, and safely stowed away in paper or wooden boxes. The sea-water requiring no addition of salt, the solution is made without trouble, and need merely be thrown down into the bilge, where the ship's motion completes the process.

The following cases, which have occurred in my own practice, will illustrate its use and successful application:—

CASE 1.—A lady living in Chester-square, who was suffering from sciatica, consulted me many years ago, and my attention was called to a large tumour in the external part of the hip-joint. The tumour was soft and not very prominent, had been very gradually increasing, and with its increase the sciatic pains became more severe. Believing it to be a fatty tumour pressing on the sciatic nerve, I could only refer her to a surgeon for its removal. It was accordingly removed by Mr. Lane, and without any hæmorrhage at the time, and proved to be a large fatty tumour the size of a child's head. The sciatic pains ceased, and the patient appeared to be in a fair way to recover speedily the effect of the operation. About a week afterwards I was asked to meet Mr. Lane, and found that the cavity from which the tumour had been removed had been distended with blood in a state of decomposition, the patient suffering all the symptoms of blood-poison: small rapid pulse, black sordes coating the mouth, tongue, lips, and nose; wandering, muttering delirium; she would take no food. The room was most offensive, the smell penetrating to the passages and other rooms. Basins containing Condy's fluid, Burnett's fluid, and bog-earth were in various parts of the room, but exercised but little influence over the fetid emanation.

Wishing to try the effect of the lead chloride, we obtained, with great difficulty, a small quantity of nitrate of lead, and prepared the solution as above described. A towel dipped in it was hung up in the room, and *instantaneously* the smell disappeared. The wound was dressed, and over the wound some lint dipped in the solution was placed. The next day we met, and found our patient sitting up in bed, quite cheerful, with a clean tongue and good pulse, enjoying a mutton-chop and some port wine. The room was perfectly free from smell.

I have had many other opportunities of using this solution with equally satisfactory results, especially in paralytic cases, where, towards the end, the fetor of the breath and emanations from the skin are most offensive.

CASE 2.—Three years ago, after a very severe storm-shower, the large drain at the back of the United University Club was burst by the flood, and opened to the atmosphere. A more distressing smell in its immediate neighbourhood could hardly be imagined. Carbolic acid was used in the Club, which substituted only one stink for another. I sent the steward for a pound of nitrate of lead, of which half an ounce was used. A towel wetted with the solution was hung up in each room, and the rest poured down the drains and into the sewer, and immediately all smell was gone. The neighbours, who were unaware of what was being done, expressed the greatest surprise at the sudden disappearance of the nuisance. Although the drain remained open for some days until it could be repaired, there was no more inconvenience felt from the smell.

CASE 3.—The wife of a horse-jobber in a very large way of business, apparently suffering from the poison of carbolic acid used to disinfect the stables where she lived, consulted me. She informed me that although the stables were well-drained and well-ventilated, the effluvium from the large number of horses and the accumulation of dung was so offensive that they had been induced to use carbolic acid, which, though painfully disagreeable, was not so offensive as the stable exhalations had been. It appeared also that since the use of carbolic acid they had lost seventeen horses, and that they could not help connecting their loss in some way with it. I recommended the immediate disuse of the carbolic acid, and in its place to try the nitrate of lead and salt. In a fortnight I saw her again in perfect health, and learnt that the stables had, from the first application, become freed from all disagreeable odour, and that the dung-pits into which some of the solution was regularly sprinkled were now sweet, to the great contentment of the horsekeepers and stablemen, with whom the removal of the dung has always been a subject of great difficulty.

CASE 4.—Some years ago, when visiting one of H.M. largest ships, I casually heard loud complaints of the nuisance caused by the bilge water. Through the courtesy of the officers, which was greater than their faith in any possible remedy, I was allowed to try the experiment of removing it, and, having procured half an ounce of nitrate of lead, it was dissolved in a bucket of boiling fresh water, and thrown down the bilge when the ship was rolling slightly. The effect was the instantaneous disappearance of all smell; a large white precipitate, which immediately afterwards

became black, subsided to the bottom, and the bilge-water became perfectly clear. The cost was one halfpenny.

I have selected these few cases as leading types of the application and results of chloride of lead as a deodoriser and disinfectant, and only trust that they may be sufficient to lead my readers to continue the experiments in different directions, as I have hitherto found it to be the most simple, the most economical, and most successful of all the processes which have come under my notice.

Sussex-gardens, W.

CASE OF

GUNSHOT WOUND (BY DERRINGER PISTOL) OF CHEST AND ABDOMEN.

AUTOPSY AND REMARKS.

BY RICHARD BARWELL, F.R.C.S.,
SURGEON TO CHARING-CROSS HOSPITAL.

A. B., aged twenty-one, shot himself with a Derringer pistol about 11 o'clock on the night of Nov. 14th, 1875. Dr. Reece saw him immediately after the injury, and directed his removal to Charing-cross Hospital. I was sent for, and arrived a little before 12 o'clock that night.

The young man had been sick instantly on receipt of the injury, and was in a state of considerable though not severe collapse. A round black wound, about the size of a sixpence, from which trickled down a drop or two of dark-coloured blood, lay over the cartilage of the left eighth rib about four inches from the sternum. No probe could be passed into this opening save for a few lines immediately below the skin, in a direction upwards and outwards. He complained of no pain except at the left acromion, where it was severe.

The Derringer is a very small toy-like weapon, about five inches and a half long, with a bore of four-tenths of an inch in diameter. It is a breech-loader. The cartridge consists of a copper cap, into the open end of which the conical bullet fits, the detonating powder being, of course, at the closed end. The fulminate is of very powerful quality, and a certain specified charge is put into each cartridge. No other propellent is, I am informed, ever added.

Finding, however, at the wound no passage inwards, I thought it well that a search should be made in the young gentleman's clothing, and elsewhere in his lodgings for the bullet, but nothing was found either there or among the undigested portions of food which he had vomited.

Nov. 15th.—This morning the collapse was deeper; he had been constantly thirsty, taking ice in lumps, brandy-and-water, and was also frequently vomiting. I again failed in passing any probe, and explained to my class that the bullet had in all probability passed through the cartilage, which had then closed again behind it like a trap-door. He complained of inability to pass urine, though the nurse said he was constantly doing so. There was no blood either in this excretion nor in the vomit. About 8 P.M. that evening he suddenly had a greater fit of vomiting, and the matter seemed to contain a little blood. He almost instantly died.

Post-mortem (Nov. 18th).—The body was much swollen, and the skin much discoloured, though there was less decomposition in deeper parts. The wound still refused to admit a probe (of course no force was used). On taking away the front of the chest the bruising and blackening was seen to occupy a greater space on the internal than on the external surface. For a long time no opening marking the track of the bullet could be found, although the pericardium, lungs, &c., were examined with the utmost care. At last a small slit was found in the diaphragm with no mark of bruising or extravasation around it. It was barely a third of an inch long, and only to be detected on very careful search. Of course this led into the abdomen, and on opening that cavity a little hole in the stomach was found, and on its posterior wall another; both these openings had a very narrow dark edging of extravasation. Removing the stomach, all trace of the bullet was lost; neither on the fat behind that organ nor elsewhere could any opening be found. The kidney was now removed, and in its upper and inner edge, just in front of the suprarenal capsule, a small crack or chasm was found, the extreme margin of which was blackened by extravasation. Behind the kidney, after careful search, a little split or rift was found in the fascia covering the psoas; it was not stained by effused blood. The probe when passed into this ran backward and a little upward, and on dividing the parts the bullet was found imbedded behind the muscle just above the transverse process of the second lumbar vertebra, its conical end directed almost directly upwards. On trying the bullet on the blackened spot on the eighth costal cartilage, it was found that by exercising rather considerable pressure it could be made to pass through a hole formed by three convergent rifts, which, instantly after the passage, snapped together again like the flaps of a valve, and left no hole nor perceptible trace of passage.

It appears to me that this case is of interest as exemplifying the fearful power of the little pistol—a thing which a man might conceal easily in his clinched fist, and which looks less formidable than many a child's toy; yet it propelled its shot all but through a full-sized man; and, as I saw, it will send a bullet nearly through an inch-thick oak board, shattering to a great distance the wood around its place of exit.

The next singular point is the very little injury the bullet did to the traversed tissues. The wounds in such vascular organs as the stomach and kidney had a dark margin of bruising less wide than the hem of a lady's handkerchief; but parts less richly supplied with blood showed merely minute slits where the bullet had passed, and among fat, as that round the kidney, no track could be found at all.

The symptom, a prominent one throughout, pain at the acromion, must, I think, be ascribed to wound of the diaphragm; the strangury to wound of the kidney.

George-street, Hanover-square.

REPORT ON THE

EFFECTS OF HIGH TEMPERATURES UPON WOOLLEN AND OTHER FABRICS.

BY SURGEON-MAJOR F. DE CHAUMONT, M.D.,
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(*Communicated by the* DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE ARMY.)

IN accordance with the Director-General's instructions of Oct. 18th, 1875, I have the honour to report as follows. The portions of fabrics selected were obtained from the store here, being condemned clothing &c., as under:—

1. Blanket—woollen, white.
2. Coverlets—woollen, coloured.
3. Hospital clothing—flannel, blue.
4. Sheeting—cotton.
5. Bed-slip—canvas.
6. Hospital lining—cotton.
7. Horsehair from mattress.

These were exposed as follows:—

Dry heat,	212° F.,	for	2	hours
"	"	"	4	"
"	"	"	6	"
"	220° F.	"	2	"
"	"	"	4	"
"	"	"	6	"
"	"	"	44	" (8 + 15 + 15 + 6 hours) on successive days.
"	230° F.	"	8	" Total, 13 hours on an iron plate on successive days.
"	"	"	5	"
"	"	"	9	" Total, 14 hrs. on a porcelain plate on successive days.
"	"	"	5	"
"	250° F.	"	4	" Total, 9 hours on successive days.
"	"	"	5	"

The following results were observed on comparing the samples with the fabrics in their original condition:—

1. Blanket—

2	hours	at 212° F.,	no change.
4	„	„	„
6	„	„	a slightly perceptible yellowish colour.
2	„	220°	slightly tinged with yellow.
4	„	„	rather more deeply.
6	„	„	
44	„	„	a strong yellow tinge.
13	„	230°	on an iron plate, a marked yellow tinge.
14	„	„	on a porcelain plate, a very strong yellow tinge.
9	„	250°	on an iron plate, a strong yellow tinge.

The order in which the shades of colour showed themselves is as follows:—

Darkest,	14	hours,	230° F.,	on a porcelain plate.
„	44	„	220°	on an iron plate.
„	9	„	250°	„ „
„	13	„	230°	„ „
„	6	„	220°	„ „
„	4	„	„	„ „
„	2	„	220°	about equal.
„	6	„	212°	
„	4	„	„	hardly any change.
„	2	„	„	no change.

2. Coverlet.—Results very similar, but less easily seen on account of the colour of the fabric. In this case also the worst was the one exposed for 14 hours to 230° F. on a porcelain plate.

3. Hospital Clothing, Blue Flannel.—In this case exposure even for 6 hours at 212° F. did not seem to have any marked effect; but 2 hours at 220° distinctly changed the colour, and all the other temperatures produced more or less effect.

4. Sheeting, Cotton.—There was no perceptible change after 6 hours at 212° F., nor after the same time at 220°; 44 hours at 220° produced a distinct colour; as did also 13 hours at 230° (iron plate), moderately; 14 hours at 230° (porcelain plate), markedly; 9 hours at 250° (iron plate), markedly.

5. Bed-slip, Canvas—

6	hours	at 212° F.,	no change.
6	„	220°	slight change.
44	„	220°	marked brownish tinge.
13	„	230°	(on iron plate) marked brownish tinge.
14	„	230°	(on porcelain plate) not tried.
9	„	250°	(on iron plate) brownish tinge.

6. Hospital Clothing, Cotton Lining—

2	hours	at 212° F.,	no change.
4	„	212°	
6	„	„	slight change.
2	„	220°	a distinct discoloration in all, in varying degrees.
4	„	„	
6	„	„	
44	„	„	marked yellow tinge.
13	„	230°	(on an iron plate) moderate tinge.
14	„	„	(on porcelain plate) marked yellow tinge.

7. Horsehair.—No particular change was observable by exposure, except perhaps slight increase of brittleness.

The conclusions to be drawn from the above experiments are the following:—

1. Woollen articles are more liable to change by exposure to high temperatures than cotton or linen.

2. Woollen articles begin to lose colour after exposure for 6 hours to a dry heat of 212° F., or after 2 hours at 220° F. Higher temperature or longer exposure produces proportionally increased change.

3. Cotton or linen fabrics can be exposed for 6 hours at 212° F., or for 4 hours at 220° F., without perceptible change; 6 hours at 220° F. shows distinct change in some cases, and longer exposure or higher temperatures in all cases.

We may therefore conclude that *woollen* articles cannot be exposed to a dry heat of 212° F. longer than six hours without suffering injury, so far as colour goes, and that two hours at a temperature of 220° F. is sufficient to produce a similar result.

Cotton or linen articles may be exposed for six hours to a dry heat of 212° F. without apparent injury, but not for more than four hours at 220° F.

I beg to append a copy of a letter from Dr. Lake, one of the surgeons of the Southampton Infirmary, relative to the experience in that institution of a drying chamber heated by gas on Ransome's principle. It will be seen that the results correspond with the effects at high temperature recorded above.

"Our disinfecting stove was at work for about seven months regularly, and irregularly for about two months before that. During that time (seven months) all the patients had a mattress and blankets which had passed through the machine; the mattresses were, as a rule, in the chamber at least eight hours each time; the blankets at least two hours. Our plan was to begin, say Monday morning. After the chamber was heated (that is 240° or 250°) it was loaded with three mattresses; the temperature would drop to a little over 200°, and in about eight hours it would be again from 240° to 250°, when the mattresses were withdrawn. Thus in twenty-four hours we baked nine mattresses. The blankets were done after the mattresses were all finished; as many pairs as the machines could hold were introduced, but in two or three hours the temperature would rise to 240°, and another charge would be baked. In this way the whole week's work was got through in about four days. I have to-day asked both the matron and the porter who worked the machine what effect the process has had on the articles. They both consider it has damaged the materials. The matron states that the blankets are all damaged and have become yellow in appearance, but she is not prepared to say they give less warmth, and is unable to speak positively as to whether they will not last as long, but she thinks they will not do so. The mattresses, she says, have been very tender, the tick tearing very easily. The long-continued dry heat has, I think, a decided effect in damaging the intimate structure of the materials, certainly of the linen and cotton goods. After a long time even wood is utterly destroyed, and becomes brittle and breaks at the least strain.

"I fear the dry heat does slowly char fabrics; on the other hand, it seems most efficient. The matron reports a most marked effect on vermin—lice, bugs, and fleas; they have been conspicuously absent. I cannot report that we have had no cases of erysipelas, but they were very few, and our operations and wounds appear to have done more than usually well.

"I have the strongest impression that we have been using a most unnecessary heat. A temperature of 220° in a few minutes destroys utterly bugs, fleas, cockroaches, &c., and in less than an hour at least, at that temperature, they are quite brittle, and fall to pieces.

(Signed) "G. A. K. LAKE."

Southampton, Oct. 21st, 1875.

A SHORT ACCOUNT OF

EIGHT CASES OF ACUTE TUBERCULOSIS, WITH SPECIAL REFERENCE TO THE PRESENCE OF CASEOUS CENTRES OF INFECTION.

BY H. M. TUCKWELL, M.D., F.R.C.P.,
PHYSICIAN TO THE RADCLIFFE INFIRMARY, OXFORD.

EVER since the promulgation in this country of the doctrine that acute miliary tuberculosis depends on, and follows directly from, the presence of caseous centres in some part of the body, I have examined every case that has come under my observation with special reference to this important question. I propose to narrate the following cases in as short a form as possible, omitting for the most part any account of the symptoms, and merely giving a brief description of the post-mortem examinations.

CASE 1.—January, 1867. Girl, aged nineteen. Tubercular meningitis. The lungs, spleen, liver, and kidneys contained miliary tubercles. The peritoneum was unaffected. In the middle of the upper lobe of the right lung was an old vomica

of the size of a walnut, with thick walls, smooth lining membrane, and cheesy contents.

CASE 2.—February, 1868. Woman, aged twenty-three. Tubercular meningitis. A few miliary tubercles were scattered through the upper lobe of the right lung. The spleen, liver, and kidneys exhibited all the appearances usually present in cases of blood-poisoning, but contained no tubercles. The right Fallopian tube was dilated into a sac filled with cheesy pus. The left tube contained a smaller quantity of the same matter. There were signs of old peritonitis, with adhesions, in the pelvis, propagated from the diseased tubes; but there was no trace of tubercle in the peritoneum.

CASE 3.—March, 1869. Man, aged twenty-six, admitted with angular curvature of the spine and paraplégia, but without any acute symptoms. After having been in the infirmary for two weeks, he became rather suddenly attacked with feverish symptoms and cough. His temperature rose steadily, his breathing became more and more distressed, his face dusky, and he died at the end of a week from the beginning of the acute symptoms. After death the brain was found to be unaffected. Both lungs were crowded with minute miliary tubercles; the upper lobe of the right lung was hepatised. The spleen was large, soft, and rotten. The liver was likewise large and swollen. Six of the dorsal vertebræ had their bodies carious, and separated from their periosteum by a thick layer of cheesy matter.

CASE 4.—February, 1870. Boy, aged four. Tubercular meningitis. The lower lobes of both lungs were congested and thickly strewn with very fine miliary tubercles. No other organ was affected. One bronchial gland was enlarged and caseous. One small cheesy collection, of the size of a pea, surrounded by a thin capsule of investing fibrous tissue, was found in the lower lobe of the left lung.

CASE 5.—August, 1871. Boy, aged fifteen. Tubercular meningitis. Both lungs were stuffed with miliary tubercles. The liver contained many tubercles on its surface and in its substance. The spleen was swollen and thickly strewn outside and inside with the same formations. One gland, of the size of a cobnut, with soft, putty-like contents, lay beneath the right sterno-clavicular articulation. The thickened capsule of the gland had ulcerated through at one spot and suffered the soft contents to escape into the surrounding tissue.

CASE 6.—May, 1873. Man, aged twenty-one. Tubercular meningitis. Both lungs were stuffed with miliary tubercles. The liver was covered on its upper surface, and strewn throughout its substance, with the same tubercles. The spleen contained many of the same, as also the peritoneum covering the diaphragm, which was thickly beset with them. At the root of the right lung, and surrounding the right bronchus, was a cluster of large caseous glands, some of them softened and of the consistence of putty. Mesenteric glands enlarged and caseous.

CASE 7.—April, 1874. Girl, aged fourteen. Tubercular meningitis. Miliary tubercles were sparsely scattered through both lungs. The peritoneum was sprinkled with a few similar tubercles. One small cheesy nodule, of the size of a pea, was imbedded in the lower lobe of the left lung, and surrounded by a thin capsule, which had at one part ulcerated through. In the immediate neighbourhood of this spot the tubercles were much more thickly scattered than in any other part of the lung.

CASE 8.—September, 1875. Girl, aged ten. Tubercular meningitis. The lungs were stuffed with miliary tubercles. A few of the same were scattered over the peritoneum. At the root of the lungs, surrounding the bronchi, was a mass of enlarged and cheesy bronchial glands. The mesenteric and lumbar glands were much increased in size, many of them caseous.

The evidence afforded by these cases seems to be, on the whole, corroborative of the German doctrine above mentioned. In all of them caseous stuff, in greater or less quantity, was found. In Cases 4 and 7 the apparent insignificance of the supposed centres of infection deserves notice. It may well be asked, Is it possible that a spot in the lungs no larger than a pea could bring about so deadly a train of symptoms, and, in the course of two or three weeks, sow the body with miliary tubercles? To this it may be answered, that the fact that the tubercles were thickly clustered round the spot in question, and seemed to radiate from it in all directions, is a fair reason for believing that this little degenerate mass may really have been the focus of infection; and this belief is further strengthened by a reference to the inoculation experiments of Villemin, Simon, Sanderson, and others, which will show how minute a speck of cheesy matter, introduced into the body of the animal experimented on, is sufficient to determine a widespread dissemination of miliary growths.

A second difficulty that presents itself, and seems to militate against the acceptance of this doctrine, is how to account for the fact that caseous glands, withered remains of former abscesses, and other collections of the kind, are often met with in post-mortem examinations without any accompaniment of miliary tubercle. It will be found, however, in all these degenerate remains of former inflammations, that the cheesy matter is surrounded by a capsule of greater or less thickness. The slowness of progress in the inflammation, which is presupposed by the very presence of caseous changes, gives rise to gradual thickening of the investing capsule in glands, of the surrounding fibrous tissue in old vomicæ or "residual abscesses"; and thus constructs a boundary-wall of protection which shall prevent future devastating excursions of this dangerous degenerate matter into the surrounding tissues or into the blood. It seems probable that, were it not for this mode of protective isolation by the natural encapsuling of degenerate products, many who are now walking about in apparently good health would have become long ago the victims of acute miliary tuberculosis. And here it may be allowable to turn aside for an instant to the subject of pyæmia and pyæmic centres, which, from this point of view alone, not to speak of other manifold resemblances, offer in their relations a striking likeness to tubercle and tubercular centres. It is well known to surgeons that abscesses in certain parts of the body are very likely to be followed by pyæmia. A very small and seemingly insignificant purulent centre, provided that it hold a certain relation to the surrounding tissues, may sow the body with multiple abscesses, and destroy life in a time which can be reckoned by days rather than weeks. In illustration of this reference need only be made to the acute periosteal abscesses of young persons. I have put up in the Oxford Museum a preparation of secondary abscess in the walls of the heart, from a boy who, after an illness of ten days, died of pyæmia, with secondary deposits in many of his internal organs, consequent on an abscess, not larger than a walnut, between his clavicle and its periosteum. I have also seen the same thing happen on two other occasions, where the small primary abscess lay between the tibia and its periosteum. On the other hand, large collections of pus, which may be even putrid, can form in the body under other conditions and with other surroundings, and not give rise to pyæmia. What are these conditions? This question has lately been handled by Mr. Savory in the columns of THE LANCET of Nov. 13th, 1875, p. 692. He submits that the explanation of this difficulty is to be found in the fact that the abscesses which do not infect "are bounded everywhere by a layer of new structure, which is, or has the character of, granulation tissue, and that this limitary membrane, when sound and unbroken, resists the passage of fluids through its substance into the blood." He alludes also to Billroth's experiments, which show that granulation tissue, when healthy, has this power of resistance. Now, may we not see here a parallelism between the investing granulations of an abscess and the investing fibrous tissue of a caseous centre? Let but an "accidental breach" in the investing abscess-wall occur, and the body is pyæmic. Let there but be in the cheesy centre a breach through the surrounding fibrous capsule to form a way into the circulation for the degenerate matter, and the body is smitten with acute tuberculosis. In Cases 4 and 7 it will be noticed that the investing capsule had been apparently opened by ulceration, and the soft contents suffered to escape into the surrounding tissue. Dr. Hermann Weber* has recorded some striking cases of the same kind.

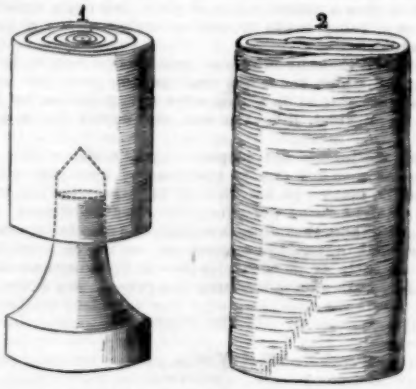
Lastly, it may be pointed out that only occasionally can a direct spreading by contiguity from the caseous centre to the neighbouring tissues, and from thence a gradual infection of more distant parts or organs, be demonstrated. The tubercles may often be found at a distance from the centre, as if the infection were rather by way of the blood than by direct extension through the tissues.

* Path. Soc. Trans., vol. xxi., p. 14.

A SIMPLE FORM OF FREEZING SECTION MACHINE.

BY URBAN PRITCHARD, M.D., F.R.C.S.,
PATHOLOGICAL REGISTRAR TO KING'S COLLEGE, LONDON, AND SURGEON TO THE ROYAL EAR DISPENSARY, SOHO.

THE difficulty of cutting thin sections of soft tissues has for many years past been acknowledged by histologists, and several methods have from time to time been suggested for solving the vexatious problem. Hardening the tissue by means of certain reagents, such as alcohol, chromic acid, &c., is the plan that is usually followed, and it is one, too, that answers well under ordinary circumstances. Frequently, however, it is desirable to cut the tissue in its fresh state, especially in the case of pathological structures, and for this reason the idea of freezing the tissue was projected. In the *Journal of Anatomy and Physiology* for May, 1871, Professor Rutherford described his excellent machine for this purpose, which is a modification of Stirling's microtome, with the addition of a surrounding ice-box. This form of machine is very useful, as I have found from considerable experience; but it necessarily requires much time and care in its use, and it was with a view to render the instrument simpler and more rapid in its action that I designed the little apparatus I will now describe.



It consists of two pieces—(1) a metallic cylinder fitted with a wooden handle; (2) a cap of thick felt.

(1) The metallic cylinder, which is solid throughout, should be made of copper on account of its conductivity, but gun metal, or even brass, will answer the purpose sufficiently well. Its exact size or shape is not of very much consequence, so long as it is large enough and convenient to handle. The following dimensions I recommend: diameter of metal cylinder 1¾ inch, length 1¾ inch; the diameter of the end of the wooden handle (*b*) should also be 1¾ inch; the plug end should taper gradually, and the hole in the metal be a deep one, so that the plug may be pushed further in when the metal contracts on cooling. Both the wooden and metallic ends are made flat, so that the instrument can stand on either extremity; on the metal surface are a series of half a dozen concentric shallow grooves.

(2) Is simply a cap of thick felt, such as is used for boilers being preferable, made so as to fit somewhat loosely over the machine (1).

Mode of using the machine.—Plunge (1) with metallic face downwards into a mixture of finely pounded ice and salt; after remaining therein for three or four minutes, take it out and wipe with a clean cloth. The instrument has now been cooled down far below the freezing point, and on placing upon the metal plate a piece of soft tissue, this immediately freezes to the machine. The cap (2) must now be placed over the metal, but not allowed to touch the tissue, which will then freeze throughout in a very short space of time, varying according to the size of the tissue from a few seconds to one or two minutes. Now reverse the cap so as to leave the metallic top free, and, holding the whole in the left hand, cut the sections with the right by means of a sharp razor which has been kept cool in ice-and-water. Occasionally, the tissue may slip on the metal; when this is the case, remove the preparation, moisten it with gum-water, and replace it, when it will be found to adhere with much greater firmness. This slipping, however, very rarely occurs with perfectly fresh tissues, the grooves on the metallic surface tending to prevent it. The tissue will remain frozen quite long enough to make several score of sections, but should a thawing action set in, it may be covered with thin gutta-percha, and the machine again plunged into the ice-and-salt.

The advantages of this little machine are, first of all, its simplicity; and, secondly, the rapidity with which tissues may be frozen by its means. To illustrate the quickness of its action, it is only necessary to drop a little water on the cooled metal to convert it immediately into ice. Lastly, the apparatus may be made by any instrument maker or metal turner for a few shillings.

Mr. Baker, of Holborn, and Mr. Swift, of University-street, are manufacturing these machines.

To those who are specially interested in the subject, I may mention that I propose showing the little instrument in action at the next meeting of the Medical Microscopical Society (Dec. 17th).

Guildford-street, Russell-square, W.C.

CASE OF FIBROID TUMOUR OF THE MASSETER MUSCLE.

BY KELBURNE KING, F.R.C.S.,
SURGEON TO THE HULL GENERAL INFIRMARY.

JOHN S——, aged thirty-two, was admitted into the Hull Infirmary on March 2nd, 1872, under the following circumstances. For two years he had noticed a hard swelling in the region of the left temple, which extended down to the back of the left cheek. It was of slow growth, but as it grew he became unable to open his mouth, and, after the end of six months, he could separate his jaws only sufficiently to admit the thickness of a match. Latterly he had lost even this slight power of separation. His jaws were immovably fixed, and he lived entirely by suction through interstices between the teeth. He followed his employment as a labourer in a ship-building yard as long as he could, but of late he became so weak through insufficient nourishment that he was compelled to leave his work and apply for relief.

On admission, a hard lump, about the size of a damson plum, was felt in the centre of the masseter muscle, and another less distinct in the temporal, about an inch above the zygoma. The tumours had the feeling of enlarged, violently contracted muscular masses. Thinking it possible that the disease might depend on hypertrophy and permanent contraction of the muscles, I immediately administered chloroform, and, that failing to produce any relaxation, I divided the masseter subcutaneously. A certain amount of relief was afforded, and the jaws could be separated so far as to admit the patient's finger.

This mitigation was not permanent. On March 30th the closure was again complete. Chloroform was administered, and subcutaneous section of both muscles was performed. Some temporary relief followed, but the advantage gained was lost by degrees.

It was now evident that some other proceeding must be resorted to for his relief. The swelling was now most marked in the temporal region, and I resolved to remove the zygomatic process, so as to relieve the tension of the masseter, and get access to the insertion of the temporal muscle.

Accordingly on May 1st I performed the following operation:—An incision was made over the zygomatic arch, from the prominence of the cheek bone to almost half an inch in front of the ear. Another incision was made at right angles to this, extending about an inch above and below it. The flaps were dissected back, the masseter divided from the lower and the temporal from the upper margin of the zygoma. The bone forceps were then applied to the anterior and posterior extremities of the arch, which was removed. The

insertion of the temporal muscles into the coronoid process was thus brought into view. The process was nipped through with bone forceps, and the muscle lifted up and dissected out. A hard dense structure was found in the centre of the muscle, which was freely removed. Four vessels required ligature.

Great improvement followed this operation, though I was myself disappointed with the results. The hard mass in the masseter continued, but the man could eat meat cut small, and was himself satisfied with his condition, and left the house on June 1st.

He again presented himself on June 24th with his jaws firmly closed, in the same condition as when he first applied for assistance. The temporal region presented a flattened appearance from the removal of the muscle, but the hard substance was still felt in the belly of the masseter.

I determined to remove the masseter, and, if necessary, to disarticulate the bone and remove the whole ascending ramus. On the 26th June, chloroform having been administered, an incision was made from the angle of the jaw to the cicatrix of the old incision over the zygoma, which was again laid open. The flaps having been dissected back, the masseter muscle was dissected away from the bone and removed. The ramus was thus laid bare, but it was found irremovably fixed by numerous strong fibrous connexions with the neighbouring bones. It seemed as if every part of the temporal muscle which had escaped excision had been converted into fibrous or tendinous structure, which held the bone firmly in its place. Under these circumstances I determined to remove the bone, which was done by dividing it from the last molar tooth to the angle by means of saw and bone forceps, then freeing it from its connexions, and disarticulating its head from the glenoid cavity. The wound healed favourably. He could open the mouth well, and left the hospital in a few weeks able to masticate freely on the right side.

I saw the man lately, and he continues quite well.

Mr. Plaxton, the pathologist to the infirmary, made several microscopic examinations of the tumour and muscular substance, and the following is his report:—"The tumour on section showed that it was not distinctly marked off from the healthy muscle, the greater part of masseter and temporal muscles being converted more or less perfectly into a hard creaking mass. The microscopic examination showed that the muscles were in process of conversion into fibrous tissue; isolated muscular fibres were to be seen between thick bundles of wavy fibrous tissue."

The muscular substance is not often the seat of disease. Though recurring fibroid is said to be frequently reproduced, it does not often originate in it. Mr. Tatum mentions a case in which he removed two recurring fibroids from the masseter and temporal muscles, but there was no train of symptoms such as I have related; neither was there anything of a recurring nature in these tumours, there having been no previously existing tumour, as in Mr. Tatum's case.*

I consider, therefore, that this is a specimen of a very rare form of disease, and in the absence of any precedent to guide us as to treatment, I believe that nothing short of the extreme measure finally taken would have afforded relief. The man masticates only with the right side of his mouth, but he can open the jaws perfectly, and is now healthy and in good condition.

SUCCESSFUL CASE OF TRACHEOTOMY IN A CHILD TWO YEARS OLD.

NEW FORM OF TRACHEOTOMY TUBE.

BY W. E. PALEY, M.R.C.S., &c.,

HOUSE-SURGEON TO THE EVELINA HOSPITAL FOR SICK CHILDREN.

THE following case seems worthy of record, partly on account of the tender age of the patient (two years), and because a new form of tracheotomy tube was used, which appears likely to be beneficial in many cases.

Ada L—— was admitted October 5th, 1875, into the Evelina Hospital, under the care of Dr. F. Taylor. A week previously she was taken suddenly ill with sore-throat and feverishness. There had been, however, no difficulty of breathing until the day before admission.

When admitted there was evidence of considerable laryngeal obstruction. The respiration was noisy, and there was marked laryngeal cough, with sucking-in of the intercostal spaces. Air could be heard entering both lungs fairly well, and the chest was resonant throughout. No diphtheritic membrane could be seen, nor did the urine contain albumen.

The patient was at once placed in a steam tent, but towards evening the symptoms became more urgent, and it was decided to perform tracheotomy. This I accordingly did, without chloroform, introducing an ordinary silver tube. Great relief of all symptoms was immediately afforded, nor was there any recurrence of the dyspnœa.

The details of the progress of the case for the few days immediately succeeding the operation present nothing worthy of special note. Subsequently several attempts were made to dispense with the tube, but without success.

At the expiration of a fortnight the silver tube was changed for a new kind of tube suggested by Mr. Morrant Baker, the details of which were carried out under my direction by Mr. Millikin, of St. Thomas's-street. The tube is single, of ordinary tracheotomy shape, and constructed entirely of flexible india-rubber. It could be inserted easily without a pilot, and did not require to be changed more than once in every two days. As far as could be judged from a single case, it was introduced with less pain, was more comfortable to the patient, and caused far less irritation than a metal one; and with some slight modifications now being made it will, probably, prove a useful instrument.

I may add that the tube was worn for one month, during ten days of which the child was running about the ward; and we were able to discontinue its use altogether on Nov. 22nd, since which date the patient has left the hospital well.

So far the tube is not proposed by Mr. Baker as a substitute for a metal one at the time of operation, but to obviate the many well-known disadvantages the latter has when required to be worn for more than a few days. But it is not unlikely that, in many cases, the elastic tube might be used with advantage throughout, as there would probably be little or no difficulty in its introduction, at the time of operation, with the help of a proper pilot or forceps.

* For Mr. Tatum's case, see Holmes's System of Surgery, vol. iii., pp. 639, 640.

A Mirror OF HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

ANEURISMAL VARIX OF LEFT COMMON ILIAC VEIN; COMPRESSION OF AORTA; GANGRENE OF INTESTINE.

(Under the care of Mr. SIMON.)

THE previous history of the following interesting case, for which we are indebted to Mr. S. Osborn, surgical registrar, was published in THE LANCET of March 6th, 1875.

Thomas K——, aged thirty-eight, a driver in the Royal Engineers, was admitted into Albert ward on Feb. 16th, suffering from aneurism within the abdomen. On the 3rd of March, after the patient's bowels had been thoroughly cleared out by castor oil, compression of the abdominal aorta by tourniquet was commenced at 10 A.M., preceded by the subcutaneous injection of half a grain of morphia at 9.30, which was repeated at 10 A.M. Mr. Simon not being satisfied with the instrument, which failed to control completely the pulsation without digital assistance, it was discontinued at 11 A.M., but recommenced at 11.30, the same

instrument being supplemented by a cord attached to the side of the bed, another injection of morphia being given at 11.30 A.M. After the application of the tourniquet the heart-murmur became more marked, and the pulse increased in frequency, probably partially due to excitement; profuse perspiration of body and flushing of face, the legs presenting a blue, mottled appearance.—12 P.M.: Restless, and complaining of very great pain. Temperature 95°. Subcutaneous injection of half a grain of morphia.—2.30 P.M.: Pain less severe, and patient quiet. Temperature 95.6°. Extremities warm; compression not invariably complete, blood occasionally passing, but stopped by an additional turn of the screw.—5.20 P.M.: Hiccough came on and lasted about a quarter of an hour, during which time pulsation was felt in the aneurism. This pulsation continued until the screw of the tourniquet was brought into a vertical position by means of another cord attached to the bed; pulsation then ceased in the tumour and in both femoral vessels.—6.30 P.M.: Feet cold; left leg feels less tense than before; penis rather turgid.—10.30 P.M.: Compression remains effectual; dozes a good deal; hands rather cold; pulse 104.—11.10 P.M.: Passed five ounces of very offensive, clear, brownish urine, non-albuminous.—11.25 P.M.: Complains of a good deal of pain; screw loosened half a turn without any pulsation becoming perceptible; hands feel warmer. Subcutaneous injection of half a grain of morphia.

March 4th.—1.15 A.M.: Temperature 99°; pulse 102; not complaining of much uneasiness.—3 A.M.: Tourniquet removed; slight pulsation perceptible in tumour and right femoral; both legs warm; patient restless; subcutaneous injection of half a grain of morphia administered; ulcerated surface on left leg looks unhealthy, and greenish in colour; an oval, red, and tender patch above umbilicus, corresponding to where pressure of tourniquet was applied, to be relieved by warm fomentations. During the whole time of compression no nourishment was taken, with exception of a teaspoonful of milk occasionally. Measurement of left thigh, 27 inches.—9 A.M.: Sleeping, looks much worn; pulsation in tumour decidedly diminished.

5th.—Was troubled all day yesterday with hiccough, which still continues with increased frequency; patient much depressed and exhausted; was sick at intervals from 11.30 P.M. until 2.30 A.M., bringing up about a pint and a half of black fluid; bowels acted twice. Morning temperature 98.4°; evening temperature 99°; pulse 120; some tenderness of abdomen, but only at point of pressure; ulcer on leg is now black in colour; slight pulsation in right femoral.

6th.—Morning temperature 98°; pulse 106; no more vomiting; hiccough still continues; appears to be doing well, but is still much depressed. Took four ounces of brandy and some champagne in the afternoon.

7th.—Morning temperature 98.8°; evening temperature 99.8°; vomited about four pints of black offensive fluid during the night, and again three pints in the afternoon.

8th.—Wife anxious to remove him, which was with great difficulty prevented; patient feels better; no pulsation in aneurism perceptible; hiccough still continues, also vomiting of black offensive fluid. Morning temperature 98°; evening temperature 100.6°.

9th.—Much worse this morning. Morning temperature 100.8°; sickness still continues; is gradually sinking. He died at 12.55 P.M.

Post-mortem.—The abdominal walls corresponding to the point of pressure were about double their ordinary thickness, due to inflammatory infiltration. The great omentum was freely adherent to the anterior abdominal wall, but presented no sign of inflammation. The peritoneal cavity contained between three and four ounces of turbid fluid. Intestines distended, especially the upper part of the small intestine; on their external surface there was scarcely any trace of inflammation, but they were glued together, especially towards the flanks, by a very thin layer of inflammatory lymph; but here and there were seen pearly spots varying in size from that of a sixpence to that of a pea, corresponding to the parts where the necrosis had removed the whole thickness of the intestine, with the exception of the serous surface, and would eventually have perforated through into the peritoneum. Mucous membrane of stomach congested and dotted with minute punctiform injections, so also the upper part of the small intestine, the injection becoming more marked as the intestine proceeded onwards, assuming at length a deep purplish-red colour. About two feet below the pylorus, on the edge of the valvulæ conniventes, were minute yellowish flakes resembling croupous exudations, this condition gradually increasing until the greater part of the ileum presented a uniform wash-leather-like slough, the mucous membrane being of an ochrous colour, relieved by the velvety red edges of the valvulæ conniventes. Springing from the point of bifurcation of the abdominal aorta was seen an aneurismal sac about the size of a hen's egg, lined by a thin layer of fibrin. The left common iliac vein, which was greatly dilated, opened directly into the sac, and had no communication with the inferior vena cava. The superior mesenteric artery was completely obliterated for a considerable length, where, together with the mesentery, it was converted into an inseparable brawny mass.

ST. BARTHOLOMEW'S HOSPITAL, CHATHAM.

FIVE CASES OF LIGATURE OF THE FEMORAL ARTERY WITH ANTISEPTIC CATGUT.

(Under the care of Mr. NANKIVELL)

CASE 1.—C. V——, aged twenty-six, a cabman, was admitted on April 17th, 1871, suffering from an aneurism of the left popliteal artery, of the size of a small orange. Patient stated that he had noticed the swelling for about three weeks.

On admission, compression was applied, and continued daily at intervals for as long a time as the man could bear it till May 22nd, when, no result having been produced upon the aneurism, the femoral artery was tied with antiseptic catgut in the usual situation. The operation was performed strictly in accordance with the rules laid down by Mr. Lister. Lac plaster was used as the dressing. On June 12th the incision was found to be soundly healed. There had been an entire absence of suppuration throughout.

CASE 2.—E R——, aged thirty-three, having previously undergone amputation of his left leg for diffused popliteal aneurism, was admitted on November 22nd, 1871, for a right femoral aneurism situated in Hunter's canal. On November 27th the artery was ligatured in Scarpa's space, carbolised catgut being used for the ligature, and the usual antiseptic dressings applied. The wound did not unite by first intention, but the pus never became putrefactive. The wound was found to be healed on December 28th.

He subsequently died at home of an aneurism of the aorta.

CASE 3.—J S——, a mineral-water maker, aged twenty-eight years, was brought to the hospital on June 20th, 1873, suffering from an aneurism of the left femoral artery, situated at the lower part of Hunter's canal. The man stated that twelve days prior to admission he noticed a swelling in the affected part. He could not account for the tumour by any fall or blow. The affected limb measured over the aneurism an inch and a quarter more than its fellow. Carte's tourniquet was applied.

July 4th.—The sac of the aneurism had become very painful. On measuring the limb it was found to have increased two inches since admission. In the afternoon deligation of the artery was performed, carbolised catgut and gauze dressings being employed.

25th.—Since the operation there had been a trifling discharge of aseptic purulent fluid from the lower part of the wound, which, on removal of the dressing, was found to be quite healed.

He left the hospital on August 6th.

CASE 4.—C. V——, the cab-driver mentioned in Case 1, reapplied for admission on April 14th, 1874, suffering from a popliteal aneurism of the right leg, which had existed for the previous eleven months, but had got much worse since Christmas.

On April 24th the artery was ligatured, carbolised catgut and gauze being the materials used. The dressings were changed daily, owing to the amount of discharge, which was, on April 28th, distinctly fetid. There was also an erythematous blush of the leg and thigh.

May 3rd.—Suppuration more profuse. The gauze was discontinued and poultices applied.

21st.—An abscess had formed in the groin, which was

opened. The wound in the thigh granulated rapidly, and was quite healed on June 17th, on which day the patient left the hospital.

CASE 5.—W. P——, a waterman, thirty-nine years of age, became an in-patient on November 11th, 1874, suffering from a popliteal aneurism of the right leg. Six months ago the man was admitted, but he then refused any operative procedure. Having become worse, he was readmitted on the above date, and the femoral artery was tied with carbolised catgut on Nov. 13th. Dry lint was used as the dressing till Nov. 16th, when poultices were applied.

Dec. 23rd.—Patient allowed to get up. Wound now merely a small superficial ulcer.

He left the hospital on Jan. 13th, 1875.

Remarks.—Cases 1 and 2 have already appeared in THE LANCET of August 26th, 1871, and February 10th, 1872. These facts deserve mention lest some surgeon on a future occasion, in collecting statistics, should count them twice over. The above five cases illustrate fairly what the antiseptic catgut can do. They are not brought forward as instances of the success or failure of the antiseptic treatment, but simply to show the results of catgut ligature on arteries deligated in continuity. In none of these patients was there the slightest sign of secondary hæmorrhage, nor was any portion of the ligature seen in the dressings. The wound was healed in twenty-one, thirty-one, twenty-one, fifty-four, and forty days respectively. In attempting to compare the period of cure of cases treated by catgut, on the one hand, and silk or hemp, on the other, it is difficult to arrive at satisfactory conclusions, because of the melting away of the ligature in the one instance and of the separation of the thread in the other. Mr. Nankivell does not think that the presence of the catgut prevents primary adhesion of the deeper parts of the incision. At all events, he was not troubled by any sinuses, as has been stated to have occurred in some cases in the practice of other surgeons.

HÔPITAL TEMPORAIRE, PARIS.

CASE OF DIABETES.

(Under the care of Prof. LECORCHÉ.)

THE following case of diabetes, presenting some interesting points, occurred in the practice of Prof. Lecorché.

P. R——, aged twenty-four, an oil purifier, was admitted into the hospital on the 24th Aug., 1875, with diabetes. His mother and sisters are all living and enjoying good health; his father died of rheumatism. Had only been once ill himself, and that with an attack of pneumonia. No history of syphilis or of intemperance.

About a year ago the patient seems to have experienced great moral sufferings, owing to some family affairs and the death of a young person whom he was about to marry. These sufferings seem to have made a most painful impression upon him.

His health began to fail three months before his entrance into the hospital. He had a constant feeling of fatigue and a sensation of weakness in the extremities. He got visibly thinner, but remarked that his appetite had increased and that he was troubled with constant thirst and his tongue was continually dry. Shortly after he began to feel a need of frequently voiding his urine, and was also troubled with some dyspepsia, burning behind the sternum, and vomiting.

On admission the patient was greatly emaciated; weight 114 pounds; complained of sharp pains in the calves, dry burning feeling of the throat and tongue; the latter was of a dark red hue and mottled with white streaks denuded of epithelium in certain spots; appetite good, but has sour eructations after copious meals. Pulse 60, strong and regular; heart-sounds normal, as also the proportion of red globules in his blood. For the last two months he had had no penile erections. His sight became confused when he read for more than five minutes, and he sometimes saw red circles; at other times everything appeared white to him; there was paralysis of accommodation. His temperature during the first part of his stay in the hospital varied from 36° to 36·8° C.

The urine was pale-citron colour, slightly acid, and contained 40 grammes of sugar and 4 grammes of urea to the litre. For the first week the average quantity of urine was 3½ litres in the day, and 2½ at night. At this period the patient had a slight attack of bronchitis, which was not followed by any bad consequences. The appetite, which had diminished under the influence of certain gastric disorders, was now again good, the patient eating eight portions a day, and 500 grammes of meat. He drank about 6 litres of liquid a day.

September 25th.—The patient had diarrhœa, and from this date the urine averaged 4 litres a day—sugar 35 grammes, urea 2·5 grammes per litre. He was put under treatment, consisting of opium pills, gluten bread, Vichy, and an azotised diet. He showed some signs of an amelioration in his condition.

28th.—Passed 8 litres of urine. Proportion of red globules diminished.

October 2nd.—Passed 10 litres of urine. Was ordered 4 grammes of jaborandi. Sweated profusely, and expectorated 3·50 grammes of alkaline saliva.

5th, 6th, and 7th.—Passed 10 litres of urine. Profuse sweating. Salivation.

8th.—Patient left the hospital at his own request.

November 7th.—Patient entered the hospital again. He had tried to work again, but was obliged to cease on account of his strength failing. He perceived a swelling situated on the lower part of the outer side of the leg. This swelling had come on without any traumatism or pain. Little by little the temperature rose, the tumour increased in size, and the skin became distended.

8th.—Fluctuation was easily felt in the tumour. Temperature 37·2° Cent. Average of urine 8 litres in 24 hours; specific gravity 1031; sugar 76 grammes, urea 5·6 grammes per litre; red globules 3,500,000 per cubic millimetre. Evening temperature 38° Cent.

10th.—Abscess opened, gave vent to 300 grammes of laudable pus. Chloral dressing.

11th to 16th.—Average of urine was 9·3 litres per diem, and the temperature lowered down to 36·6°. Abscess presenting a favourable appearance.

17th.—Urine 12 litres; sugar 100 grammes, urea 7 grammes per litre.

This increase in the proportion of sugar was due to the weakness consequent on the inflammation.

Remarks.—Prof. Lecorché indicated the following points of interest in the case:—1. The etiology of this case would tend to confirm the opinion entertained by MM. Claude Bernard, Seegen, Bouchardat, and Pavy, as to the influence of nervous causes in determining the disease. (Experiments of Claude Bernard on Spinal Cord, 4th vent.) 2. The enormous quantity of sugar, 1200 grammes a day, and the fact of the urea being always in proportion to the quantity of sugar, as stated by MM. Pettenkofer, Vogt, and Lecorché, who admit an augmentation in the quantity of urea in cases of diabetes; polyuria being in proportion with quantity of sugar. 3. The formation of an abscess, which was opened without the supervention of any gangrene, which is stated to be the general result in cases of this kind by certain authors. This complication verified the statement that the temperature rises in diabetes under the influence of an intercurrent inflammation. Under the influence of this inflammation the quantity of sugar was reduced to 300 grammes, which augmented to 1200 grammes as soon as the appetite returned, notwithstanding the treatment he was put under. Prof. Lecorché terminated his remarks by saying that he regarded all treatment in advanced stages of the disease as almost useless, and considered that in these stages the proportion of sugar in the night urine might equal, and even exceed, that of the day.

BEQUESTS, &c., TO MEDICAL CHARITIES.—Mr. Wynn Ellis bequeathed £15,000 to the Hospital for Sick Children, Great Ormond-street (£10,000 to the general fund and £5000 to the building fund), and £2000 each to the Royal Westminster Ophthalmic Hospital, the Royal Infirmary for Women and Children (Waterloo Bridge-road), the Royal London Ophthalmic Hospital, and the Seaside Convalescent Home, Seaford. Mrs. Elizabeth Balls, of Streatham, bequeathed £2000 Consols to the Cancer Hospital, and £500 Consols each to the Earlswood Asylum for Idiots, St. Thomas's Hospital, and Guy's Hospital.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

THE ordinary meeting of this Society was held on the 7th inst., Mr. Geo. Pollock, President, in the chair. Many cases of great interest and importance in a clinical as well as a pathological point of view were brought forward. Among them may be indicated an example of obliteration of the superior vena cava (probably congenital), shown by Dr. Habershon; a specimen of pulmonary and tricuspid disease, by Dr. Morison; and one of cirrhosis of the liver in a child, by Dr. Griffiths, of Swansea. The latter case led to some interesting facts as to alcoholism in children.

During the evening the following gentlemen were elected members of the Society:—A. E. J. Barker, H. W. Page, M.B., G. J. Malcolm Smith, M.B.

Mr. JONATHAN HUTCHINSON made some remarks upon three cases of Molluscum Contagiosum, which were peculiar in the widespread distribution of the eruption. He exhibited drawings of the eruption from a man aged fifty, in whom, at first sight, the affection might have been mistaken for lichen, so small were the spots, which were distributed all over the trunk and limbs. They were largest and most characteristic on the back, where their origin in sebaceous glands could be well seen, and the contents readily extruded by pressure. In the two other cases the eruption was similarly diffused, but the spots were more characteristic. Mr. Hutchinson remarked upon the somewhat rare occurrence of the affection in the adult, and on the copious eruption in these cases, which also had a clinical value, in that in one of them it had been for some time treated as a syphilide. In reply to the President, he stated that there was no history of contagion to be obtained in the case.—Mr. WARREN TAY said that some three years ago a man aged about forty presented himself at the Hospital for Diseases of the Skin covered by molluscous spots, except on the face and scalp. No history of contagion could be obtained. Examined microscopically they showed the usual features of the affection.—The PRESIDENT thought it would be of interest if Mr. Hutchinson would state what treatment he pursued. — Mr. HUTCHINSON said that in the first case the spots were too numerous to be treated in the ordinary way — viz., slitting up each nodule with the scissors. In one case, however, he had so cut out nearly two hundred of the spots. — Dr. COUPLAND referred to the recent researches of C. Boeck and Lukomsky, who appeared to have arrived independently at the same conclusion as to the histological nature of the molluscous tumour, which they regard as having but little to do with the sebaceous glands, but to depend rather upon a peculiar modification of the upper layers of the rete Malpighii. The change consists in the formation of the so-called "molluscous bodies" within the epidermic cells, which some authors have mistaken for spores, and others for fat or altered sebaceous products. — Mr. HUTCHINSON said that the sebaceous origin of the molluscous nodule was undoubted and most easy of demonstration, the inspissated secretion of the gland being readily squeezed out of each nodule.

Mr. MORGAN exhibited a specimen of Stricture of the Hepatic Duct with Cystic Dilatation of its Terminal Radicles. It was obtained from a patient fifty-two years of age, who was admitted into St. George's Hospital with jaundice, pain in hypochondrium, and headache. His symptoms dated back four months, when he was attacked with diarrhœa. The liver enlarged under observation, and two tumours could be felt on its surface. There was found to be extreme fatty degeneration of the heart; the liver was much enlarged, smooth, and presented several cysts projecting on the surface, which proved to be formed by dilatation of the bile-ducts. The gall-bladder was distended, and a stricture of the common bile-duct just below its origin was found. The duct was adherent at the point of stricture to a perforating ulcer of the duodenum.

Dr. LEGG showed a specimen of Congenital Stricture of the Hepatic Duct, with consequent cirrhosis, obtained from an infant who had lived to the age of five months, having been jaundiced from birth. There was no bleeding from the navel when the funis separated. The liver and spleen enlarged under observation. After death the hepatic and portal vessels were found to be natural. The cystic and hepatic ducts opened into a cyst the size of a marble, between which and the duodenum passed a membranous band. Followed towards the liver, the right hepatic duct was first much dilated and then greatly thickened, so that its branches within the liver could not be pursued. The left duct was thickened throughout, and almost impervious. The liver was granular and markedly cirrhotic. The spleen was very large. Dr. Legg stated that there were only eleven such cases on record, two being recorded in the Path. Trans., one by Dr. Wilks and the other by Dr. Nunneley. In Dr. Nunneley's case the infant lived seven months. He thought that the cirrhosis of the liver was secondary to the dilatation of the bile-ducts, because of the rarity of cirrhosis in infants, the limitation of the thickening to the walls of the ducts, and the fact that ligature of the duct in animals led to similar interstitial increase of connective tissue. There was no evidence of syphilis in the present case. It appeared probable that in many cases of umbilical hæmorrhage there was a similar congenital obliteration of the duct, but post-mortem records of such cases are rare. Dr. Legg thought the occurrence of umbilical hæmorrhage could be explained by connective tissue growth in the hilus of the liver constricting the portal vein, and thus tending to keep the umbilical vein open, the blood flowing in the direction of least resistance. In many cases of umbilical hæmorrhage there was bleeding from other parts of the portal tract.

Dr. FRED. ROBINSON showed a specimen of Aneurism of the Ascending Aorta. The aneurism was of the size of a walnut, and was seated just above the central aortic cusp, pressing on the pulmonary vein. The pericardium contained sanguinolent fluid, but there was no communication between it and the aneurism. The specimen was obtained from a soldier, forty-three years of age, who had contracted syphilis thirteen years previously, but who at the time of the onset of the aortic symptoms showed no evidence of the syphilitic taint. He suffered from precordial pain, and on examination a soft systolic bruit was heard over the aortic valves. The existence of aneurism was not suspected during life. Death took place suddenly. Dr. Robinson remarked upon the question of aneurism in relation to syphilis, and stated that, in his opinion, syphilis, intemperance, and pressure on the chest were the three main causes of aneurism, but he did not think that syphilis played so great a part as had been recently propounded. He thought also that the effect of pressure was mainly to produce disease of the heart.

Dr. HABERSHON exhibited a remarkable specimen of Occlusion of the Superior Vena Cava in a man thirty-seven years of age. He had been a coalheaver, and had remained well till seven years before his death, when swelling of the face and great congestion of the face and upper extremities came on, with great distension of the superficial abdominal veins. A diagnosis of intra-thoracic tumour was made, and the patient left the hospital partially relieved, having taken iodide of potassium. He returned, however, at the end of a year, and finally sank from dropsical effusion into the abdomen. Fomentations only afforded partial relief. After death it was found that the superior vena cava was obliterated; its position in the right auricle was marked by white puckering of the endocardium; the innominate veins ended in a cul-de-sac, and large communicating veins passed in front of the pericardium into the mammary veins, also into the smaller and greater azygos veins, by which the blood was carried downwards into the inferior cava, and thus reached the heart. There was much fibroid thickening around the aorta and in the position of the superior cava; the pulmonary valves were imperfect, there being two valves and the rudiments of a third placed on a somewhat lower level; there was some chronic peritonitis, but no disease of the abdominal viscera. Dr. Habershon thought the occlusion to be congenital, in support of which he adduced the malformation of the pulmonary valve and the absence of syphilitic disease or tumour. If the obliteration o the cava had been from without, there would have been

more evidence of an opening into the auricle.—Dr. D. POWELL asked if there was any history of cyanosis in early life. The cicatricial-like appearance of the part where the vena cava should enter seemed to favour the view as to its congenital origin.—Dr. HABERSHON said that the man appeared in good health up to thirty years of age, and followed his arduous occupation without any shortness of breath or other symptoms of venous obstruction.—Dr. CURNOW asked how the blood found its way from the left side of the body into the auricle.—Dr. HABERSHON replied, chiefly by the left innominate, the intercostals, and the small azygos vein, as well as by a large vein passing over the pericardium to join the mammary vein. The upper part of the azygos major was obliterated.

Dr. HABERSHON also exhibited a case of fatal Hæmatemesis, in which the hæmorrhage came from a chronic ulcer in the first part of the duodenum. The vena porta was perforated; a sloughing cavity extended to the fissure of the liver. There was inflammatory change along the portal vein, and several abscesses in the liver. The gall-duct was partially destroyed.—In answer to Dr. LEGG, who inquired in what way the bile escaped, and why there was no jaundice, Dr. HABERSHON said that the duct was not obliterated, although partially destroyed. The bile passed into the duodenum through the sloughing cavity.

Dr. ALEX. MORISON showed a specimen of Disease of the Tricuspid and Pulmonary Valves obtained from a youth twenty years of age. He had had scarlet fever when five or six years old, and was known to have heart disease when eight years of age. There was a strong family history of rheumatism, cardiac disease, and phthisis. The patient had never had rheumatism, and had enjoyed fair health till about eighteen years of age. There was a systolic bruit close to the left edge of the sternum, near the xiphoid, not traceable round the left chest; while over the third left rib and second space, close to the sternum, there was a hard, grating, double murmur, not propagated into the larger systemic arteries, but towards the left shoulder. There was evidence of great enlargement of the heart, regurgitation into the jugulars, epigastric pulsation, &c. There was engorgement of the lung and albuminuria. A few days before death some œdema of the face and scalp appeared. The necropsy revealed obstruction and regurgitation through the pulmonary valves, which were much altered and distorted by warty growths. The tricuspid valves were similarly diseased. The right cavities were hypertrophied and dilated. From the physical signs, the pulmonary lesion was easily detected, but it was thought that the apex systolic murmur might be mitral, though the failure to trace it round the left chest seemed to negative this view. During life the patient had some attacks of purpura, probably due to the venous engorgement and resulting capillary stasis.—Dr. GREENFIELD thought it possible that the lesion was not one of ordinary endocarditis, and on his suggestion the specimen was referred to the Committee on Morbid Growths.

DR. GRIFFITHS exhibited a specimen of Cirrhosis of the Liver obtained from a female child ten years of age. The parents were healthy; there had been seven children, of whom three had died in infancy, but there was not the slightest evidence of syphilis. The present child had scarlet fever at the age of three, and had suffered from infantile paralysis. Early in 1870 she had an attack of vomiting, followed later by jaundice, with enlargement of the liver; no ascites, no anasarca. The cause of this enlargement was obscure, there being no lymphatic affection, no tubercular or pleuritic history. The jaundice lasted about two years, and the child improved in health, but last year ascites supervened. The liver was now small, the spleen very large. Some jaundice again occurred, and the ascites increased. Paracentesis was twice performed, but the child sank. The liver weighed fifteen ounces; it was hard and tough, and partly adhered to diaphragm. It presented all the characters of cirrhosis.—Dr. MURCHISON said the case was of great interest as bearing upon diagnosis. He confessed to have been somewhat sceptical as to the occurrence of cirrhosis of the liver in children, but only quite lately he had met with a case of cirrhosis of the liver in a child nine years of age; and here, as probably in other cases that have been recorded, there was undoubted evidence of spirit-drinking. The child's father was a publican, and the child used to crave for drink, and had every opportunity of satisfying its craving. It certainly was highly probable that cirrhosis might be so caused in early life, considering the functions of the liver at that time. Dr. Griffiths's patient seems to have been delicate, and might possibly have taken wine medicinally, but in sufficient quantity to induce cirrhosis.—Dr. GRIFFITHS said that he made very careful inquiry upon this head with negative result.—Mr. T. SMITH suggested that the child might have taken steel wine when suffering from infantile paralysis.—Dr. GRIFFITHS replied in the negative.—Mr. PARKER referred to a case of a boy nine years of age which had been in the Hospital for Sick Children, under the care of Dr. Dickinson. In this case the boy had been in the habit of carrying his father's dinner to a cab-stand, and the father had constantly induced the boy to take spirits. There was marked ascites, with retraction of the liver.

Dr. GREENFIELD brought forward some fresh specimens of Visceral Syphilis, obtained from a female twenty-five years of age, who had suffered from syphilitic disease of the palate for four years. Death occurred somewhat suddenly after an attack of left hemiplegia with spasm of the affected muscles. Examination showed extensive syphilitic disease of the cerebral arteries, and the specimens brought forward included the spleen, kidney, and liver, which were the seat of numerous gummata. One of the kidneys was completely infiltrated. Dr. Greenfield proposed to bring forward the results of his microscopical examination of these organs, and of the arteries, on another occasion.

The Society then adjourned.

Reviews and Notices of Books.

On Addison's Disease. Being the Croonian Lectures for 1875. Revised and Illustrated. By EDWARD HEADLAM GREENHOW, M.D., F.R.S., F.R.C.P., Lecturer on the Principles and Practice of Medicine at the Middlesex Hospital. London: Longmans and Co.

THIS work, as the title indicates, consists of the Croonian Lectures at the College of Physicians on the subject of Addison's Disease, delivered in the spring of the present year. The book contains, however, much more than the original lectures, which were published in full in our columns at the time of their delivery, and will therefore be fresh in the memory of many of our readers. To these, which constitute, in fact, only the first half of the work, we have two valuable appendices, the first containing the detached reports of thirty-seven selected cases given as evidence of the facts on which the conclusions are based, and the second a reference to the 333 cases of disease of the suprarenal capsules of which the author has been able to discover a record. The work is also enriched with excellent coloured plates representing the naked-eye appearances of the tongue and of the diseased capsules, and also of the microscopical appearances of the skin and mucous membrane and of the diseased capsules, the former chiefly by Mr. Henry Arnott, and the latter from the pencil of Dr. Sidney Coupland. The appendices and plates alone, therefore, give a great additional value to the book.

There is scarcely any disease in the whole range of medicine in which a greater variety of problems is involved, the elucidation of which requires wide study both of the special disease and of other morbid conditions; and, whilst the fascination of the subject has led many to frame hypotheses as to the connexion of the several parts of the disease with each other, many of these have been grounded only on individual cases. And there is scarcely any other disease the history of which shows so clearly the fallacies which may arise from imperfect observation and hasty generalisation from individual cases, and the necessity of a strictly logical inquiry. In the opinion of some, the evidence seemed to prove that Addison's disease had no essential connexion with disease of the suprarenal bodies,

and still less with any specific affection of these organs. Dr. Greenhow has, therefore, done great service in collecting and comparing all the available evidence, and sifting it in such a way as to show how far our knowledge at present goes and on what points we are yet in default, and in thus clearing the ground for future investigation.

In his first lecture, after a slight outline of Addison's life and of the history of his discovery, Dr. Greenhow gives a description of the clinical features of the disease with the varieties in its symptoms and progress, and of the morbid anatomy in well-marked cases. These, especially the latter, are for the most part remarkably clear and good, but on the subject of temperature, with the exception of the statement that it sometimes falls considerably below normal in the last stage of the disease, we find no information, possibly from want of recorded observations. In the second lecture the question of the association of a special morbid condition of the capsules with the bronzing of the skin and the general symptoms is discussed; the several classes of cases which have led to erroneous views are also in turn considered, and the various fallacies involved exhibited, the conclusion being that there is an essential connexion of the special disease of the capsules with the general symptoms and the melasma, but that of the latter either may precede the other. It is this lecture which we would especially commend as of value, from the thoroughness of the investigation and the clear light in which the facts are placed, and we believe that Dr. Greenhow's conclusions may be accepted as correct. In the third lecture the author takes up the difficult problem of the intimate pathology of the disease, and of the relation of the capsular disease to the melasma and the general symptoms. After showing that they cannot be due solely to the destruction of the tissue of the capsules, as these may be destroyed by other morbid growths without symptoms, and in Addison's disease itself the symptoms bear no direct proportion to the extent of the morbid process, he accepts the view which is now usually adopted, that they are due to nervous lesions, either by the affection of nervous filaments in the capsules themselves, or more probably by the secondary implication of the nerve trunks and ganglia of the solar plexus and its neighbourhood, and particularly of peripheral branches of the pneumogastric nerve to the plexus and the capsules. The bronzing of the skin he also believes to be due to reflex irritation through the cerebro-spinal nervous system, and not to a morbid condition of the blood. In coming to these conclusions, the facts deduced from the morbid anatomy, the clinical features, and physiological facts are all carefully considered. The difficult subject of etiology is next discussed, and Dr. Greenhow shows that in a certain number of cases the disease has apparently originated by extension of inflammation from disease of adjacent parts, especially psoas abscess and disease of the lumbar vertebræ; whilst in others it has been traced to a blow or strain. And he points out the important fact that it is of far more frequent occurrence in those classes whose occupations subject them to the risk of such injuries. These facts are suggestive, and may ultimately lead to a more definite knowledge of the causes of the disease. On the question of the nature of the morbid growth Dr. Greenhow is wisely reticent, and does not give his adhesion to the view that it is tubercle, whilst laying due stress on the large percentage of cases in which phthisis has coexisted with the disease. In the present state of knowledge this seems the wisest course, especially remembering the large percentage of phthisis in diabetes. Diagnosis, prognosis, and treatment are summarily dismissed in two pages, and we observe with regret the absence of an index; but these are only small and remediable defects in a work of great value, which will long be the standing work of reference on the subject, and will possess a permanent interest for all future workers.

Transactions of the Clinical Society of London. Vol. VIII. 1875.

THE present volume of Transactions of this young and flourishing Society is but little inferior in interest to any of its predecessors. It contains, in addition to the Address of the President, forty-six papers, for the most part consisting of brief records of cases, many of which possess a permanent value. It is true that the volume is of far more modest character than those of the Pathological and Medico-Chirurgical Societies; but it must be remembered that whilst the latter Societies exist rather for the permanent record of ascertained facts, the Clinical Society has from the first devoted itself more to the discussion and elucidation of clinical cases of interesting or doubtful nature. Thus it not infrequently happens that the case related forms only the text of a valuable discussion, in which other cases of even greater value are narrated, and the result of the debate is often to place the original case in a very different light from that in which it had been viewed by the author. Of all this there is no record in this volume of Transactions, which, therefore, does not really represent the great value of the Society.

It is unnecessary for us to enter into the merits of the various cases individually, all of which have been recorded, and many commented upon, in our columns. Some of them will be long remembered on account of their pre-eminent rarity, recording isolated cases which would seem to upset all our former clinical experience; such as the case of high temperature, related by Mr. J. W. Teale, which, although enshrined in this volume, will yet, we imagine, be the subject of rational scepticism until confirmed by further cases of a similar nature, carefully investigated. Of other cases of great interest from their novelty, we may note one of creeping eruption, shown by Dr. R. J. Lee, on which we have also a valuable report by Drs. Dickinson, Tilbury Fox, and Dyce Duckworth. Some of the cases are noteworthy rather from their inordinate length as contrasted with their value; indeed, some of the most valuable cases are those which are most briefly and concisely narrated. It would perhaps seem invidious to select examples of this kind. It should be remembered that, as the cases are usually read in full, the discussion is commonly of far more value when the cases have been clearly and briefly put, in such a manner that the main features are fully apprehended, and the attention is unwearied by needless detail. That "brevity is the soul of wit" might well be adopted as a motto by the Society.

With regard to the general arrangement of the volume, it would, we think, be an advantage if the papers were classified under their subjects instead of being placed in chronological order; this would increase their scientific value.

Finally, we have a word to say about the way in which the work has been edited, if, indeed, there has been any editing at all, of which we have no sufficient evidence, external or internal. But whoever may have been responsible has been guilty of serious negligence. First of all we have a list of contents, in which certain errors strike the eye at a glance, and make us afraid to examine more fully. Thus we have a heading of "Severe Epilepsy, *caused* by excision of Neuroma," which, as may be supposed, turns out to have been *cured* instead of caused. Then a case of poisoning by "Hydral Chlorate," a name with which we are not familar, but which turns out to be a synonym of chloral hydrate. And not only is this name repeated in the heading of the case, but we find the case carefully indexed under both titles, lest there should be any confusion from the use of the

new term. The index itself is a curious compilation which will well repay a careful and critical study, having apparently been constructed by the "printer's devil" with the aid of a kaleidoscope, and a table of permutations and combinations. The system, if system it be, which has been followed, appears to have been to enter every case as a case of every separate symptom to be found in the title, as well as in full, and under the author's name—a system which of course increases the number of cases, and introduces some novelties. Then we have such errors as "larnyx," "pharnyx," &c., which greatly increases our suspicion as to the origin of the index. Unless an index is to be of some value, it would be better to omit it altogether in future volumes, at any rate until a responsible editor is found for the work.

A Manual of Physiology. Being a Course of Lectures delivered by Prof. Küss at the Medical School of Strasbourg. Edited by MATTHIAS DUVAL, and translated from the Second and Revised Edition by ROBERT AMORY, M.D., formerly Professor of Physiology at the Medical School of Maine. London: Baillière, Tindall, and Cox.

A SOMEWHAT hasty glance at the contents of this new Manual of Physiology has led us to form a favourable opinion of it. Less bulky than Kirkes and Paget's treatise, or than Dr. Carpenter's smaller work on Physiology, it represents the French rather than the German side of this subject. It is, at the same time, clearly written and fairly readable for a translation. Too much stress appears to be laid upon the importance of the epithelia. The corpuscles of the blood, of nervous-tissue epithelium, &c., are constantly and erroneously termed globules, and statements are sometimes made which, however probable they may be on *a priori* grounds, should not be dogmatically asserted in a work intended for students. As, for instance, when (p. 121) it is stated that "the principal object of the functions performed by the blood-globules is to excite or support the nervous system, as the nerves can exist only where the blood-globules are properly constituted, and contain the necessary quantity of oxygen gas." We imagine many facts in comparative anatomy militate against this much too positive statement. So, again, the curious views of Rouget on muscular fibre, to the effect that it is a true spiral spring which, actively distended during the repose of the muscle, returns upon itself at the moment of contraction, and hence that muscular contractility is a purely physical property of elasticity; and much more in the same strain is given as though it were proven, instead of being, as it really is, purely hypothetical. If some objectionable features of this kind, which might easily be expurgated by an able editor, were removed, Dr. Amory's translation of MM. Küss and Duval's work would prove very serviceable. It contains much that is not contained in any other treatise in the hands of the English reader. The theory and laws of the reflex actions are well given, and, on the whole, a due proportion is maintained between the several subjects. The numerous woodcuts, which are for the most part of a diagrammatic character, are exceedingly good, and materially elucidate the text. Though we do not believe the work, which we understand is having an unprecedented sale in America, will supersede our own text-books, we do think it may be advantageously read with them.

A System of Midwifery. By WILLIAM LEISHMAN, M.D. Second Edition. Glasgow: Maclehose. London: Macmillan.

IN about two years after the first issue of this excellent treatise a second edition has been called for. The work has undergone general revision and correction, but alterations have been chiefly made in the chapters on Physiology and Puerperal Fever. It will be remembered that in the first edition the view that puerperal fever was "a disease belonging to the so-called zymotic class, the proximate cause of which is some peculiar poison to which lying-in women are liable by contagion, or which is under certain circumstances developed in the puerperal state," was adopted. At a meeting of the Obstetrical Society, held last session, at which puerperal fever was the subject of debate, Dr. Leishman stated that he had found reason to renounce the above view. How complete this change of opinion has been will be seen from the following passage from the present edition:—"The first question to be determined then is, does such specific poison exist? or, in cognate terms, does any such disease occur as specific puerperal fever? To this question we do not hesitate to give a negative reply," &c. The view espoused now by Dr. Leishman is that the majority of cases of puerperal fever are of septic origin, and that the septic poison is communicated to the patient by attendants, or generated in the patient's own body by decomposition of the discharges occurring after labour; other cases are due to the poison of acute specific diseases, typhus, typhoid, &c. In the latter case the disease may run the course of that with the poison of which the patient has come in contact, but more frequently it runs the course of puerperal fever. To this view we subscribe our entire adherence. These chapters give a full and complete account of the symptoms and treatment of puerperal fever, but we cannot help remarking that they want more vividness of description.

We regard the treatise as thoroughly sound and practical, and one which may with confidence be consulted in any emergency.

Medicinal Plants. Parts I. and II. By ROBERT BENTLEY, F.L.S., and HENRY TRIMEN, M.B., F.L.S. London: J. and A. Churchill.

ALTHOUGH the day of the medical herbalist has passed away, and treatises upon so-called "medical botany" have been replaced by works on the general science itself, without respect to the materia medica, yet we gladly welcome this present publication as a valuable addition to medical literature. It has started upon the most catholic principles, it being the intention of the authors—than whom none are more fitted to undertake it—to make their work a kind of illustrated companion to the pharmacopœias of the world. It will, when completed, thus comprise a collection of drawings of medicinal plants unrivalled in extent and character. These first instalments promise well for the work, which of course will be better judged when it shall be published in full. They comprise no fewer than fifteen faithfully coloured plates of various plants, some of which have never been figured before, and the letterpress accompanying each plate is a concise and clear account of the botanical features of the plant, its medicinal properties and preparations. The English reader will be greatly enlightened by the appearance of this publication, in that he will hear for the first time probably of many plants whose virtues have found expression in the Pharmacopœias of India and the United States.

The plates strike us as being executed with a faithfulness and clearness of outline which leave nothing to be desired, and we trust the enterprise of the publishing firm in issuing them at so cheap a rate will be fully repaid.

Diaries.—At this season of the year we usually receive copies of diaries of various sorts for inspection. We give the first place among those we have already received to "The Physicians' and Surgeons' Visiting List," published by Messrs. John Smith and Co., of Long-acre, upon a plan

furnished to them by Mr. Seymour Haden. In addition to being a diary, it contains a good deal of useful information, likely to be of service to the practitioner, concisely arranged. "The Chemist and Druggist's Diary" for 1876 fully maintains its reputation; it is published at the office of the *Chemist and Druggist Journal*. Messrs. Partridge and Cooper have sent "The Folio Scribbling Diary" for 1876, price 1*s*.; "The Diary and Call-book," price 2*s*.; and "The Octavo Scribbling Diary," price 2*s*.,—all interleaved with blotting-paper.

POST-MORTEM EXAMINATION OF THE REMAINS OF HARRIET LANE.

A Clinical Lecture, delivered at Westminster Hospital,

BY THOMAS BOND, F.R.C.S., B.S. LOND.,
ASSISTANT-SURGEON TO THE HOSPITAL AND LECTURER ON FORENSIC MEDICINE.

GENTLEMEN,—As you probably are aware, I was employed by the Treasury to make the post-mortem examination upon the human remains found in the possession of Henry Wainwright. I was at once fully impressed with the grave nature of the task committed to me, and approached it with a mind absolutely free from any preconceived ideas as to the guilt or innocence of the prisoner. This condition of mind it was of course necessary to maintain during the whole of the inquiry, as it was my business to interpret facts only, quite regardless of the result to the prisoner.

On the 16th of September I met Mr. Larkin, who had already made a preliminary examination, and had given certain evidence before the magistrate. He had removed the abdominal and pelvic viscera, and very properly had placed them in jars which had previously been cleansed with distilled water. He had very carefully taken off the skull-cap without injuring the dura mater or brain; he also discovered a cut in the throat, to which he attributed death. But I proceeded to the investigation methodically and carefully, without troubling my mind with any theory or preconceived opinion.

There were, of course, two main questions to determine:—1st, the cause of death; 2nd, the identity of the remains.

I found the body in a sealed coffin, the lid of which was partially of glass. This was a very convenient method for exposing the body to the jury, and also to the relatives. I had the remains removed from the vault into the yard, and on opening the lid the horrible and peculiar smell at once indicated an advanced stage of decomposition. Availing myself of Mr. Larkin's valuable assistance, I proceeded to the examination. The remains were laid on a table in an open yard, with a good light, and carefully placed in position. They consisted of ten pieces. (1) The head and neck, which was separated from the trunk between the sixth and seventh cervical vertebræ; (2) the trunk, including thorax, abdomen, and pelvis; (3 and 4) the two thighs, divided from the pelvis through the neck of each femur; (5 and 6) the two legs with the feet attached, separated from the thighs at the knee-joints; (7 and 8) the two arms, which were cut off at the shoulder-joints; (9 and 10) the two hands, one being separated at the wrist and the other about two inches above. There was also found adhering to the body a quantity of white greasy material mixed with earth, which I subsequently found by chemical examination to be chloride of lime. This, I have no doubt, in a great degree contributed to the preservation of the superficial parts of the body, by the formation of a coating of adipocere, which is the result of a chemical combination of a fatty acid with a mineral base, generally supposed to be ammonia, when the tissues become changed into adipocere; but in this case the base was probably lime. Where this covering of adipocere was deficient the flesh had eroded in patches. At other parts it had dried, appearing white, silvery, and smooth, as if stretched over the subjacent tissue. It certainly gave me the idea at first of numerous scars, similar to those produced by slight scalds. This appearance played an important part at the trial, as Mr. Aubin, the surgeon for the defence, cut out one of the patches and called it a scar.

From the nature of the hair, the shape and contents of the pelvis, and the slender limbs, it was evident at once that I had before me the complete body of an adult female, and that it had been hacked apart by a rough and unskilled hand. The woman had evidently been dead many months, for the face, the front of the thorax, and part of the abdomen were quite decayed. No trace of features could be distinguished, although Mr. Larkin made the discovery that the ears were pierced for earrings. The limbs, however, and the lower part of the abdominal walls were covered with the dark-brown greasy substance which I have described as adipocere, and on scraping away which, the skin underneath was found well preserved, but in a dry and shrivelled condition. The thoracic, abdominal, and pelvic viscera, with the exception of the uterus, were so much decomposed that no examination was made of them, but the condition of the uterus was accurately noticed. It was very small, not above an inch long, and not a quarter of an inch in thickness. The colour was very dark brown, and to the touch it felt like soap. It was carefully put aside and soaked in water for subsequent examination. The division of the body was undoubtedly of recent date, as proved by the freshly cut bone and muscle, the former hanging about the cut parts in chips, and the latter flaccid and not retracted from the cuts. The cutting seemed to have been done by a blunt adze or chopper, and the appearances were consistent with its having been done with a hatchet shown me by the police. The scalp was partially separated from the skull, and more particularly so on the right side, and attached to it was a quantity of curly auburn hair, which was fixed at the back of the head to a pad by a number of hair-pins. On the left side of the head the hair was clotted with a dark substance resembling dried blood. The sutures of the skull were well marked and distinct, with the exception of the frontal, which was quite obliterated. On the right side of the skull, just above the articulation of the posterior inferior edge of the parietal bone with the squamous portion of the temporal, there was a depressed fracture, the size of a sixpence, and at the back part of the depressed bone there was complete penetration of the skull by a hole large enough to admit a small bean. The fracture must have been caused by a hard, blunt substance, striking in a direction obliquely backwards and inwards. The fracture was not of recent date, the broken surfaces being of dark colour, and similar in appearance to the exposed portion of the skull. The depression was not easily seen at first sight, as it was filled up with a dark substance similar to that found about the body—viz., chloride of lime and earth, which was probably here mixed with blood. The fracture was somewhat stellated, but it did not extend into the lateral sinus.

The scalp was detached over the fracture and around it for a distance approximately of two inches, exposing the bone. There was a penetrating wound of the scalp, and when drawn forward the hole corresponded to a point on a level with, but an inch posterior to, the fracture. The under surface of the scalp around the hole was dark-coloured, and its substance infiltrated with blood to a depth of one-sixteenth of an inch. The under surface of the uninjured portion of the scalp was of a pale-brown colour. The dura mater was detached from the skull-cap and entire, except opposite the fracture, where it was perforated. Its surface was of a light-grey colour, but exactly opposite the fracture it was very dark brown, and appeared thicker. On cutting through the membrane at the point of puncture, the dark colour was found to extend through to the under surface, and the brain in contact with it was dark-brown for a distance of half an inch around the hole. This was caused, I had no doubt, by infiltrated blood, and I therefore formed the opinion that the injury was inflicted during life. On passing my finger through the hole in the dura mater into the substance of the brain, I found two spiculæ of bone. I enlarged the opening in the dura mater, and carefully removed the decomposed brain, which was in a semifluid condition, and of a light-brown colour; then carrying the exploration on in the direction of the hole through the skull, I found a much flattened bullet lying in the left hemisphere of the cerebellum. It must have entered the skull obliquely,

from before backward, and had struck the occipital bone just behind and on the left side of the foramen magnum, causing a slight stellate fracture of the inner table. This bullet undoubtedly caused the injuries I have described. On removing the dura mater and the soft pulpy brain I discovered a second bullet lying on the posterior clinoid processes of the sphenoid bone, which were both broken off. This bullet was slightly flattened on the top only, and appeared to have entered the skull by direct impact. On further examination, I found a hole in the skull exactly above the base of the zygomatic process of the right temporal bone, and, passing my finger directly inwards along the base of the skull, and in a line with the petrous portion of the temporal bone, I found a large spicula of bone half-way between the hole and the position of the bullet. I found no appearance of effused blood in the track of this bullet inside the skull, but found a quantity of dried blood around the external opening just in front of the ear. I formed the opinion that this wound was probably inflicted directly after death, as I should have expected to find evidences of blood in the track of the bullet had it been fired during life. The injury was of old date, and probably inflicted when life was ebbing, or directly after death.

A cut two inches long extended from the right side of the thyroid cartilage upwards to the left angle of the lower jaw, dividing all the tissues down to the vertebræ. The larynx was partly divided, and the cut, shallow and superficial at first, enlarged towards the left, and went deeply upwards under the angle of the jaw. It nearly divided the body of the third cervical vertebra, and extended through the transverse process on the left side. The surface of the wound was retracted and dried, quite the reverse of the flaccid and soft appearance of the cuts separating the limbs and trunk. It appeared to have been inflicted from the front upwards and backwards; it was a clean cut, and must have been done with a sharp instrument. The incision in the vertebra was dark and dry at the edge, but the deeper portion was clean and very fresh-looking. I saw no appearance of blood in the wound, but there was a quantity of clotted blood around the left ear, and the hair on that side was matted together with blood. I could form no opinion as to whether the cut was inflicted during life or after death, but it certainly did not appear a recent cut. About the cut in the vertebra I was much puzzled. The fresh-looking and moist surface of the deeper part of the cut seemed to indicate recent infliction. I decided to give no positive opinion with regard to the wound in the throat. I believed it to be of old date, but I could not swear that it was not done in cutting up the body, especially as the tissue of the face and neck was much drier than the other portions of the body, and the parts had necessarily been somewhat more exposed during the careful examination of Mr. Larkin in the preliminary examination.

There were four teeth absent from the mouth—one upper incisor, one canine, and two lower incisors. They had evidently fallen out during decomposition. The canine and one of the lower incisors were afterwards found and replaced. The first bicuspid of the upper jaw was decayed to the root; all the other teeth were sound. The wisdom-tooth of the left upper jaw was still uncut, and the mucous membrane had to be removed to expose it. The upper incisor was slightly prominent. The cartilages of the ribs were not at all ossified. The bones of the skeleton were light and small, the cancellous tissue abundant, and the articular surfaces were cartilaginous and soft. The epiphyses had united at the parts I examined—viz., the neck of the femur, the head of the humerus, and the articular surfaces of the tibia. From the above appearances I inferred that the age of the deceased was from twenty to twenty-five years.

The above is the substance of my report to the Treasury after my first examination. The subsequent examinations were made in the interest of the prisoner and in the presence of Mr. Aubin, a surgeon appointed to watch the case for the defence. My acknowledgments are due to Mr. Aubin for the courteous behaviour and proper spirit with which he approached the investigation. During the course of it three more important observations were made. First, the discovery of the scar, which I was induced to look for through having heard Mr. Lane say before the magistrate that his daughter had a scar on one of her legs, but he did not know which. I first scraped the adipocere from the left leg, and failed to find one, but on carrying out the same process on the right leg, found most unmistakably a raised fibrous scar situated exactly over the fibula, about two inches below the head. It was about the size of a shilling, rather elongated from above downwards and backwards. The skin in front was healthy, but much puckered and drawn, and at the back there was the usual white discolouration found after a burn or scald. The fibrous portion was brown and raised, almost keloid in its character, being at least an eighth of an inch thick.

We next turned our attention to the hands and feet, which were exceedingly slender and much dried; the nails were long, and there was no mark of a furrow on the ring finger. The feet measured eight and a half inches, and on comparing them with a boot of Harriet Lane's it was evident it would fit. Finally, we adjusted the parts as accurately as possible, which was not easy, owing to one or two vertebræ in the neck having got loose, and from the chopping up of the neck of the femur, which rendered it very difficult to fix the thighs in the exact anatomical position; however, we did our best, and after several trials found the exact measurement of the height was 4 ft. 11½ in.

I took possession of the third cervical vertebra and of the scar. I also cut off some of the hair, which I afterwards compared microscopically with some hair taken out of the grave at Whitechapel by Inspector Fox, and likewise with some hairs found on a hatchet and spade. Mr. Larkin took charge of the uterus, and of the pad and hair-pins found at the back of the head, in which he found subsequently a bullet flattened against the hair-pins.

(To be concluded.)

THE WATER-SUPPLY OF THE METROPOLIS.

NEARLY a hundred pages of the last Report of the Rivers' Pollution Commission are devoted exclusively to the past and present history of the water-supply of the metropolis. The quality of the London water has been the subject of many investigations, and as long ago as 1828 a Royal Commission was appointed to inquire and report upon the subject, and a more complete system of filtration was recommended. It was found, however, as had been predicted, that mere filtering could not, and does not, remove organic matters in solution, and that when the Thames, during heavy rains, received the flushings of the sewers, streets, and cesspools, the drinking-water supplied was often execrably bad in quality. No changes as to the intake were, however, made until 1848, when the Lambeth Company obtained an Act authorising them to remove their intake from Lambeth to Thames Ditton, above Teddington-lock, and consequently beyond the reach of the London sewage. In that and the following year the metropolis was severely visited by epidemic cholera, and in 1850 the General Board of Health (consisting of Lords Carlisle and Ashley, Mr. Chadwick, and Dr. Southwood Smith) reported decisively that in consequence of its hardness and its various modes of pollution, the Thames water ought to be abandoned for domestic purposes. In the following year another Commission was appointed to examine into the proposed new sources of supply, and the unfitness of the water procured both from the Thames and the Lea having been further demonstrated, an Act was passed in 1852, providing, among other things, that no water shall be taken by any company supplying the metropolis below Teddington, or from any tributary of the river within the range of the tide; that all storage reservoirs within five miles from St. Paul's shall be covered, and all water supplied for domestic purposes filtered. The immediate results of this Act were to remove the intakes of all the companies above Teddington-lock. The East London Company also moved its intake beyond the reach of the tide in the Lea, and the Kent Company, having abandoned the polluted Ravensbourne, obtained its supply henceforth from deep wells sunk into

the chalk. These alterations effected a very material improvement in the quality of the water supplied to London, and the result was a great saving in human life during the subsequent cholera epidemics of 1854, and especially of 1866. Official inquiries were again made in 1856 and 1857, with no very special results, and in 1865 the first Rivers' Pollution Commission was appointed. The report appeared in the following year, and the evidence shows most indubitably that, as regards both the Thames and the Lea, the water is polluted above the intakes of the various Companies by the sewage of the towns through which the streams flow, as well as from drainage of the land and other sources. Some very unsavoury details are given in the report before us relative to the Lea, from which the East London Company still take their water, and since 1866 no amelioration has taken place in the condition of the river. The next Commission, which was presided over by the Duke of Richmond and consisting of Sir John Thwaites, Colonel Harness, Sir Benjamin Phillips, Mr. T. E. Harrison, and Mr. Prestwich, reported in effect "that there is no evidence to lead us to believe that the water now supplied by the Companies is not generally good and wholesome," and that "when efficient measures are adopted for excluding the sewage and other pollutions from the Thames and the Lea and their tributaries, and for ensuring perfect filtration, water taken from the present sources will be perfectly wholesome." Experience, however, teaches that these last conditions are wholly impracticable. A large amount of evidence as to the transmissibility of certain diseases by the agency of water and other kindred subjects is quoted by Mr. Simon, Drs. W. Farr, Parkes, Odling, Playfair, and Angus Smith, and elaborate analytical tables are appended, showing the comparative quality of the various waters supplied. London is at the present time supplied by eight private companies, six of which take their water exclusively from the Thames and Lea. The New River Company takes the water it distributes chiefly from the Lea, but partly from springs and deep wells, and the Kent Company supplies deep-well water only. This last, the only really good supply (and the only one which the Commissioners recommend should be retained) is obtained from wells situated at Deptford, Charlton, Plumstead, Crayford, Shortlands, and Belvedere. Upwards of 42,000 houses are thus supplied with about 9,000,000 gallons of water daily. The shafts of these wells are lined with cast-iron cylinders from 70 to 100 ft. in depth, and are thus properly protected against surface infiltration, and from the bottom of the shafts bores are taken to the full depth of the wells. The Commissioners remark that the sole defect of this water is its hardness, and record an opinion that "the supply of such water, either softened or unsoftened, to the metropolis generally, would be a priceless boon, and would at once confer upon it absolute immunity from epidemics of cholera." There are, however, besides the sources of supply above-mentioned, a large number of public pumps drawing their supplies from shallow wells. In 1872 a return of these wells was moved for by Mr. Kay Shuttleworth, and analyses of waters taken from them proved them to be, with few exceptions, highly infected with all kinds of contamination. The water of only three of these wells is, as we recorded last week, fit for drinking purposes. The chapter closes with a detailed description of a scheme, by Mr. J. F. Bateman, for bringing to London some of the hard waters of the Severn, and one by Mr. G. W. Hemans and Mr. Hassard for a supply from certain lakes in Cumberland. The estimated cost of the former would be about eleven and of the latter more than twelve millions. But the Commissioners give strong reasons for their opinion, "that the whole of the metropolis and its suburbs should be supplied exclusively with the spring and deep-well water of the Thames basin," because it is excellent in quality, abundant, and within a moderate distance of the metropolis.

TRICHINOSIS.

EPIDEMICS of trichinosis are not frequent, but those which occur and are recognised are so wide spread as to render it increasingly evident that the disease has obtained and maintains no limited foothold. From the east and the west news of its occurrence reaches us. In Germany, indeed, its existence seems to be well looked for, and a corresponding decrease in the disease may be expected. It is evident that its ravages have been already checked by careful scrutiny of pork. In the district of Brunswick, according to the report of Dr. Uhde, only twenty affected pigs were found out of a total examined of more than 100,000. Eighteen of these were, however, found in the city of Brunswick. But from America the account is less reassuring. We have received from Dr. Sutton, of Aurora, Indiana, an instructive account of a carefully investigated outbreak of the disease which occurred in that town in 1874, in which nine persons were attacked, three of whom died. The disease in each could be traced to the same cause; all had eaten of some uncooked smoked sausages made from the meat of a pig which was subsequently shown to be full of trichinæ. The symptoms were mainly those of gastro-enteritis; muscular pains were conspicuous in only a few instances. In one of the fatal cases, however, the muscular tenderness was so great that the patient could scarcely be moved, and persistent general œdema was very marked. In this case examination of the patient's muscle after death showed it to be so crammed with trichinæ that their numbers were estimated at 100,000 in every cubic inch. In the other two fatal cases, although the circumstances of outbreak and symptoms were the same, scarcely any trichinæ were found in the muscles, the post-mortem appearances being those of gastro-enteritis. One or two trichinæ were found in the intestinal wall. In the first case the general œdema and muscular tenderness occurred in ten days from the onset of the gastric symptoms, and as a week is considered necessary for the development of the young trichinæ in the alimentary canal, their diffusion into the system must have been effected with great rapidity.

The resemblance of the symptoms in two of the fatal cases, and in those which were not fatal, to a simple inflammation of the alimentary tract, is a fact of much importance, which was further confirmed by experiments on dogs. Its importance lies in the fact that while trichinosis had no place in the Registrar-General's returns in America a few years ago, dysenteric and enteritic affections produce a great number of deaths, and Dr. Sutton brings forward facts to show that a considerable proportion of the pigs killed in the Western States are affected with the disease. Microscopic examination of the flesh of several thousand pigs killed in South-eastern Indiana showed that from 3 to 16 per cent. were affected with the disease. The Western States are the chief pork-producing districts. It is estimated that in them five million pigs are killed and sent away each winter, their flesh being the chief animal food of a large portion of the population of the United States. If only 4 per cent. of these pigs are diseased the number of affected animals annually sent to the American market is upwards of two hundred thousand! If it be true that in 90 per cent. of the cases of trichinosis the chief symptoms are intestinal, trichinosis may have been effecting serious unsuspected ravages for many years.

With reference to the alleged identity of "hog cholera" and trichinosis, careful examination of the flesh of six animals dead of the former disease failed to show the slightest evidence of trichinæ, and the two diseases are therefore regarded by Dr. Sutton as distinct. Three out of four cats fed on diseased meat were found to be swarming with trichinæ; in none of forty-two rats and of eight moles examined could any trichinæ be found.

THE LANCET.

LONDON: SATURDAY, DECEMBER 11, 1875.

THE representatives of the English Examining Bodies interested in the formation of a Conjoint Board held a meeting on Friday, the 3rd instant. The meeting was private and deliberative. Nevertheless, we presume that we shall not do any harm by announcing that the general feeling of the representatives was decidedly favourable to the scheme. It was resolved to invite the Society of Apothecaries to send two representatives to the conference. Hitherto this Society has been incapable of joining in the negotiations. It has lately been empowered to do so, as our readers know, by a special Act of Parliament; and, as the will is not wanting, we may expect its representatives to be present at the next meeting of the Conference, to be held on Thursday, the 23rd inst. It was further resolved, at the late meeting, to request the College of Surgeons to state what changes it desires in the scheme agreed to by the Committee of Reference. The College will probably make a statement of such changes, which will be considered at the meeting on the 23rd.

It seems to be felt on all hands that the present opportunity of effecting a practicable Conjoint Scheme may be a final one, and ought therefore to be seriously used. There is an impression abroad that any difficulty which now remains rests with the Royal College of Surgeons, who are supposed to be tenacious of their influence in the nomination of Examiners in Surgery. The Conference has taken a respectful course in asking for a formal statement of the views of the College. We must remember, too, that the present Conference takes place on the invitation of the President of the College of Surgeons. Taking all these things into consideration, we are hopeful that we may soon have to announce that differences have been removed and rival feelings and claims adjusted. Whatever may be thought of the probable working of a Conjoint Scheme in England, there can be no doubt that the English bodies will gain much credit by agreeing to such a scheme. They will set an example which Ireland and Scotland will not find it easy to ignore. The College of Surgeons has most to lose by a Conjoint Scheme; but it has also much to gain. If it shows an obstinate resistance, it may retain its great privileges a little longer; but it will fare worse when inevitable changes do come. We hope it will show, at this supreme crisis, that it knows when to yield.

THE employment of the cold bath as a routine treatment in cases of fever has only of late years come into vogue in this country; and even yet it has been carried out but indifferently, and has not received the full amount of attention that it deserves. It is too often restricted solely to cases of hyperpyrexia, and its full value as a great and powerful antipyretic agent has yet to be appreciated. One of the greatest obstacles in the way of its employment lies in the trouble and disturbance involved in the procedure; but even these are but minor difficulties in the path which cannot prevent its general adoption if it be really of such value as its supporters make out. Professor LIEBERMEISTER has long been known as one of the highest authorities upon febrile diseases; and his article on Typhoid Fever in the new "Cyclopædia of Medicine" is one of the most valuable contributions to medical literature that have appeared in our day. We propose to review here the arguments which he adduces in this article in favour of the employment of the cold bath, taking occasion to point out in what direction his method departs from that usually followed in this country. The material he has had to work upon has, indeed, been vast; for, as he tells us, in six years—viz., from 1865 to 1871—no fewer than 1900 cases of typhoid fever passed under his care at the hospital of Basle! For the purposes of comparison, however, between the cases treated prior to the general adoption of the cold-water plan and those subsequently so treated, LIEBERMEISTER takes but 1743 of those cases; of which, 861 were treated under the old *régime*, and 882—the total of the last three years—upon the new system.

Starting with the axiom that by "far the greater number of those who succumb to typhoid fever die from the effect, directly or indirectly, of the fever heat," LIEBERMEISTER points out that antipyretic therapeutics must form the basis of the rational treatment of this (as of any other) fever. And chief among all antipyretics is to be ranked cold water, of which the history of its introduction as a therapeutic agent by CURRIE in the eighteenth century, its subsequent neglect, and its revival on the Continent in comparatively recent times, is now too well known to bear repetition. BRAND and JÜRGENSEN, however, deserve to be remembered for the active part they took in the advocacy of this method, and to them LIEBERMEISTER accords all due honour. He then proceeds to give brief but clear directions as to the best means by which such treatment can be carried out, premising that, although the main object is the abstraction of heat from the body, the manner of performance should be such as produces the desired result with the least inconvenience to the patient. We know no work, except that of BRAND, wherein such rules are so precisely laid down as they are here. Authorities—in this country at least—differ as to the degree to which the water in the bath should be heated when the patient is first put in it—whether it should be, say, 90°, and then gradually cooled to 70° or lower; they also differ as to the duration of the bath—whether this should be prolonged until the temperature of the body falls to normal, or whether it should be comparatively short and reliance be placed on the subsequent fall (which invariably occurs) in the temperature of the body. We have known cases where, in spite of the cooling of the water, the time taken in the fall of the body temperature has been so slow that the patient has been kept in the water for an hour and a half, supported by stimulants, taken out almost in a condition of collapse, and requiring the application of external warmth to neutralise the depressing effects of the long immersion! Such treatment LIEBERMEISTER sternly discountenances, and, however much it may have produced the desired effect of reducing the temperature, it is surely at the expense of

the patient. Moreover, in such cases, the reaction is often disagreeably sudden and severe, so that within an hour or two the whole process has to be repeated. The plan followed by LIEBERMEISTER is, in brief, this: The patient is wholly immersed in water at a temperature of 68° F. The duration of the bath does not exceed ten minutes, and in the cases of feeble persons the duration should even be reduced to seven or five minutes. A short cold bath, he avers, has much better effect than a prolonged tepid one; except, again, in the case of very prostrate patients, for whom a bath of 95° gradually cooled to 72°, as recommended by ZIEMSSEN, is to be preferred. The indication for the bath is the safe and sure one obtained by the thermometer, a temperature of 103° in the rectum or 102·2° in the axilla being the usual limit to be allowed before having recourse to the bath. The frequency with which the bath should be repeated is entirely governed by the same standard; and, other things being equal, the number of baths required will be in exact proportion to the severity of the fever, the severest cases requiring a repetition of the treatment every two hours; while in some instances, Prof. LIEBERMEISTER tells us, the total number of baths required by one patient during his stay in hospital exceeded two hundred. As a rule, however, four or eight baths per diem suffice.

We have dwelt thus fully on the directions of Professor LIEBERMEISTER because it seems to us of the highest importance that, if this treatment is to be introduced into this country with any measure of success, it can only be by the adoption of a uniform scientific method, and not by the restriction of the treatment to cases on the verge of death from hyperpyrexia, nor by a too blind adhesion to the belief that a mere reduction of the temperature of the body to the normal is all that is requisite. Before, however, urging the general adoption of these measures, which would have to be applied in almost every case of fever, it is but right that the evidence adduced in its favour by LIEBERMEISTER be considered. This we may now proceed to do.

First of all comes the question of the effect of the bath on the course of typhoid fever itself. Does it in any way hasten the process of recovery, and help in the elimination of the poison? To this question a negative answer must, we think, be given. And at first sight even facts seem to point the other way; not that the duration of a first attack is retarded, but that it renders the patient more liable to relapse. Thus LIEBERMEISTER gives a percentage of relapses of 7·4 before the introduction of this treatment at Basle, as against 9·4 after the innovation; while the mortality in the relapse was five times as great. But he at the same time points out a fallacy in taking these statistics, which are based on the whole number of cases under treatment; for he says that formerly the mortality in the first attack was higher than now. Taking, then, only those cases in which a first attack has been passed through, the relative proportions of the two percentages are diminished, being on this basis as 9:10·3, instead of as 7·4:9·4. It must be borne in mind that relapses may occur more frequently now simply because those patients would have died earlier had not the cold bath been employed. However, he believes the question to be an open one, the evidence being in favour of a progressive increase in the frequency of relapses *pari passu* with the more extended application of this method. The same fact has been noticed by BIERMER.

One other question of great practical import in the use of cold water in typhoid is that which relates to pulmonary complications, so frequent and so baneful in their effects. Here the balance of statistical evidence adduced by LIEBERMEISTER is strongly in favour of the treatment. Thus, using the same number of cases already mentioned, he has noticed that, whereas before the treatment the frequency of pneumonia was 7 per cent., with a mortality among those so attacked of 50 per cent., since the cold-water treatment the average frequency of this complication has fallen to 6·4 per cent., and its mortality to 30 per cent. This diminution in the fatal cases of pneumonia is one of the strongest arguments in favour of the general adoption of this method. A like satisfactory and well-marked diminution in the frequency and mortality of hypostatic congestion and other pulmonary complications has also been noted, so that he says with truth that "affections of the respiratory apparatus occur rather more rarely and run their course with less severity under the cold-water treatment than under any treatment which is not antipyretic."

There is no need to point out further the value of the bath as a sedative—its marvellous effects in calming delirium and all the series of nervous symptoms attributable to high temperature,—for these are well known and have been fully insisted on by all those who have recorded cases of hyperpyrexia so treated. Nor is there any need to point out how it acts in steadying and controlling the action of the heart, changing in a brief space a feeble thready pulse into a moderately full, regular, and soft one. The simple fact that remains from the study of such advocacy as is here presented to us by LIEBERMEISTER is: that, of all antipyretic agents, the cold bath stands pre-eminent (over even other modes of cooling—as by affusion, the wet pack, &c.) both as to its certain action and as to its ready application. We can do no more than urge our readers to the perusal of this valuable and suggestive monograph, which will do much to establish the "Cyclopædia of Medicine" in the high rank it promises to take. If every article in the fifteen (or more?) volumes contain as much original thought and clear statement as this one, the work will indeed be of enduring value.

THE publication of the Report on Sanitary Measures in India, 1873–74, enables us to illustrate from another point of view the observations we made three weeks ago suggested by the serious interruption of the Prince of WALES's tour in India on account of prevalence of cholera. Dr. JOHN SUTHERLAND, in the letters with which he has favoured us, taking exception to our observations so far as they related to the Army Sanitary Commission, has failed to note their precise significance. Dr. SUTHERLAND writes under the impression that our observations were prompted by a desire to support a particular theory of cholera diffusion. They had a much wider scope, and referred to the discussion by the Army Sanitary Commission of complicated questions of etiology, and the expression of opinions thereupon, from data which the Commission itself had shown to be, or which it should have been obvious were, worthless. This is no question of water theory or any other

theory, of one disease or of another, but a question which lies at the root of sound investigation of every disease and condition of disease whatever. To take, however, Dr. SUTHERLAND'S suggestion, the "water theory" in relation to cholera is readiest to hand to illustrate our meaning beyond the possibility of mistake. In the India Office Report referred to, the Army Sanitary Commission undertake to answer, among other questions put to it by Dr. CUNINGHAM, the Sanitary Commissioner with the Government of India, the following:—"Is there anything in the evidence given in my Report [referring to his Report of the Cholera Epidemic of 1872 in Northern India] to support the idea that cholera was spread by specific poison drunk in water?" To this the Commission replies: "Without prejudging the results of more extended inquiry, and supposing that every obtainable information on the subject during the epidemic of 1872 has been recorded, the Committee has been unable to discover any evidence in support of the conveyance of cholera infection in drinking-water." Now, the kind of information upon which this conclusion is founded is thus described by the Commission in its special memorandum on that Report (the italics are our own): "One section of the notes [of local inquiries attached to Dr. CUNINGHAM'S Report] refers to local sanitary conditions accompanying the great mortality among British troops in 1872. These notes *purport* to have been drawn up at affected stations by local sanitary advisers, and yet we can find little to help us to reply to the main practical question raised by this Report—namely, what removable local conditions can be grappled with so as to diminish the susceptibility to cholera among troops in future. *In regard to some outbreaks no allusion is made to the subject. In most cases the information is limited to casual remarks about the drainage or about the wells.* As no reference is made to the condition of the water-supply, as shown in the reports on water analyses at the stations, there are no means of estimating the relations between the quality of water and the amount of cholera. *There is no evidence to sustain a current theory that cholera poison conveyed in water is the cause* [!] *of cholera.* So far as any real sanitary information is concerned, *these local reports contain little of any value.*" In other words, information of a nature which would have discredited an ordinary inspector of nuisances in this country, and which would be insufficient to meet the simple practical sanitary requirements that should result from the performance of his functions, is held by the Commission sufficient to enable it to pronounce an adverse opinion regarding a mode of diffusion of cholera which has the assent of the men most competent to judge in this country. The information, it should have been obvious, was worthless for any purpose whatever; how unutterably worthless is especially shown by Dr. H. BLANC in his account of cholera in Yerrowda Central Gaol this year, published in THE LANCET of the 21st August. Here, as in every other instance that we have yet seen where exhaustive inquiry has been made in India, the results have been the same as obtained in this country.

On evidence similar in character to that referred to above, the Commission has not hesitated to express the opinion that Dr. CUNINGHAM'S Report "has brought certain important questions regarding cholera to an issue"; adding, that "the appeal now made sets aside all opinions and theories, and requires to be answered solely on facts." On like evidence the Commission itself discusses questions of immunity of districts from cholera, of the dormancy of the disease, of the significance of solitary cases, &c., and in each instance to set aside as doubtful or worthless European experience. So also it deals with questions of the distribution of small-pox &c., amusingly unconscious that opinions commonly taught in European medical schools, respecting which it affects to see doubts, have been formed with full regard to all the supposed difficulties which puzzle it. But in the recent India Office Report chief interest attaches to a memorandum of the Commission on enteric fever. Here, as in the case of cholera, the Commission proceeds to discuss the etiology of the disease, and to raise doubts as to the soundness of European teaching, upon information just as worthless as that which it used regarding cholera. For anything that appears to the contrary in the memorandum, MURCHISON might never have written. It first describes generally, and inaccurately, the common conditions of filth under which enteric fever is usually observed to prevail in England. Then it proceeds to inquire to what extent these conditions are observed at military stations in India, and, finding that they are not present in any gross amount, it infers that English opinion on the subject will not apply to Indian experience. The fallaciousness of this argument is apparent. It ignores wholly the experience of palaces, of barracks, of schools and other public buildings, and of fairly ordered English towns, such as Croydon and Eastbourne, which might have most fittingly been compared with presumably controllable and controlled military stations. The Commission quotes the Surgeon-General's opinion, that the evidence collected from medical officers' reports leads to the conclusion that the disease "could not be satisfactorily traced to any special local insanitary condition, beyond perhaps some defects of surface drainage." In illustration of this the Commission gives a summary of the reports on the sanitary state of stations in which enteric fever had prevailed, and this is the staple matter: Water—"quality *generally* good." "Drainage imperfect; present drains choked with grass." "Water ought to be filtered." Tank water—"several grave sources of defilement running into the tanks." "No *observed* sanitary defects." "Sanitary arrangements *generally* good." "Soakage into floors and defective drainage; *no special causes of enteric fever dwelt on*"—and so forth, in every instance. Upon these notes the Commission observes that they "*contain all that is at present known* as to the local causes of enteric fever"; but yet it considers itself justified in expressing doubts as to the well-ascertained results of European knowledge on the subject! Nay, more. Although the existence of enteric fever among the native population became first known only in 1873, the Commission writes as if this important fact had no bearing upon the question of the causation of the disease among the troops! Equally astonishing is the fact that it does not appear to have observed that the figures of the mortality from enteric fever among the troops quoted by the Surgeon-General is very high as compared with that of the male population at the same ages in agricultural districts of England.

The Army Sanitary Commission appointed to deal with sanitary works has done excellent service in this direction at home, in the colonies, and in India; but in undertaking to deal with questions of etiology it has taken upon itself a task for which, by its constitution, it is eminently unfitted. Nothing but mischief can arise from the factitious importance which it has given to certain opinions which have been recently broached in India on the etiology of cholera and enteric fever—not on account of the opinions, but on account of the encouragement thus offered to perfunctory inquiry and perfunctory sanitary supervision. The crude comments of the Commission act, as we have good reason to know, like a dead-weight upon Indian sanitary inquiry and work, discouraging the efforts of capable men; they, in fact and of necessity, from the important relations of the Commission to the India Office, largely neutralise the teaching of Netley. The gravity of sanitary questions in our great dependency requires very different treatment at the India Office. Under present arrangements sanitary questions and work in India are drifting towards hopeless confusion. To meet the exigency of the occasion, the India Office would do well to call Professor PARKES to its aid. His transference to the India Office as the head of a medical sanitary department, would best meet the present requirements of the India Office in medico-sanitary matters, and would best satisfy the profession and the public that due justice was being done to them. Professor PARKES might well be spared now from Netley for this great work, and his presence in the India Office would infuse at once a healthier life into Indian sanitary administration.

MR. SECRETARY CROSS has expressed an opinion that nearly all which can be done in the way of Sanitary Reform is to remove legal obstacles and help the masses to help themselves. Nevertheless, the passing of Acts of Parliament to facilitate the wise ordering of public or social affairs is not *legislation*. This should be borne in mind, because, while it is quite true that the best way to get a reform thoroughly carried out is to induce those who are responsible for the *status quo* to undertake its accomplishment, if the change needed is not entirely local and capable of being achieved by local action, trusting to local effort is sure to result in a want of harmony when the general effect comes to be realised. This is precisely the evil which is likely to ensue from permissive-law making in relation to matters medical. The concerns of public health are not of a class to be left to spasmodic local enthusiasm. The population is—like the old Hebrew symbol for people, water—subject to all the laws of transfusion and intermingling. Diseases spread; conditions of health or unhealthiness insensibly extend and become common to the whole community. The attempt to stamp out a malady in one locality, without applying the same or equally effectual measures for its extinction in other localities, is like the super-sagacious policy of Bumbledom, which, by the adoption of particularly severe labour-tests or imprisoning all the tramps and vagrants, in a single parish, drives the troublesome forms of pauperism into the next parish, and then claims credit for having performed a national service. No real good can be done, or a single satisfactory step taken in the interest of general public health, unless such measures are adopted as will reduce the sum of disease in the country at large, and this is not to be achieved by simply stimulating local zeal and enterprise. We do not mean to imply that local reforms are not useful in themselves, and in a very distinct degree tributary to the general advantage. No doubt, if every department did its duty, the national organisation, as a whole, would be largely benefited. But this is not the light in which State responsibility justifies a Government in treating the obligation to rule for the national good. Looking at the matter from the local standpoint, it is clear that every locality is bound by the code of honour, no less than by self-interest, to do the utmost within its means to advance the general welfare and prosperity. But looking at the matter from the central government point of view, it is necessary to treat the general need as calling for general measures to satisfy its requirements. An appeal to the males of the population to arm themselves, coupled with the grant of a small sum of money, by way of loan, to purchase arms, would not obviate the necessity of organising and maintaining a national army, even though it were required that a drawing of every firearm should be sent up to London to somebody to be inspected, confirmed, and signed. It may be desirable to encourage the formation of local corps of yeomanry and volunteer battalions, but nothing short of an imperial measure of defence would suffice to protect the empire against a formidable enemy. Precisely the same principle applies to the protection of the community against disease and the host of morbid influences which are rapidly tending to a deterioration of the stock and lowering the vitality of the nation.

We think it desirable to call attention to these very obvious considerations at this crisis, because there is already grave reason to fear that much of the local enthusiasm which fired up so rapidly under the first influences of the Artisans' Dwellings Act and the newly codified Public Health Acts will end with a mere flash in the pan. There are signs of exhaustion, which may issue in collapse. It seems as if the unaccustomed outburst of energy had used up all the strength. We hear of grand schemes of improvements being frittered away, of zealous officialism growing faint-hearted, of second thoughts being preferred to the good resolutions born of sudden convictions. It would be a great pity, and altogether a most deplorable and humiliating eventuality, if, after the generous warmth stirred by recent measures, there came a period of cold and selfish parsimony. There would not be so much danger of such a calamity if the Government of the day had not trusted wholly to the *vis a fronte*. As the case now stands, there is really nothing in the shape of *vis a tergo* except the medical officers' "representations"; and while we have great confidence in the wisdom and independence of medical officers of health, it is impossible not to recognise the extreme difficulty of their position, and the multitude of formidable obstacles which beset and embarrass a resolute and adequate discharge of their duties. It is not necessary to urge, more earnestly than we have already pleaded, the needs of the situation, or to incite these gentlemen to remember and perform the full extent of their task. That high sense of rectitude and fearless self-respect which have happily animated and inspired our profession in all public

emergencies may be safely trusted to produce their proper fruit at this season. It is, nevertheless, impossible not to feel that too much has been devolved on men who, however self-sacrificing and energetic, are after all only human, and for the most part more dependent in fact than they may seem in theory. How very different would be the position of affairs at this moment if, instead of being wholly permissive, the Acts recently put in force had been compulsory. Besides the improved security for action to which we have already alluded, there would have been uniformity in the measures adopted. Something, possibly, may be gained by emulation; but this is a broken reed to lean upon. It would have been incomparably better if a visitation of localities, under central authority, had been made the basis of local action; thus relieving the local medical officer from the onus of initiating a costly scheme, which must often entail a loss of personal popularity, and supplying him with an incentive to exertion. As it is, everything in the shape of responsibility devolves upon the medical officer of the district, and with it goes the penalty of striving to reform where a tacit countenance of evil would, in nineteen cases out of twenty, be infinitely more agreeable to local authorities and district ratepayers. Then, again, why has the important question of payments to medical officers been left to those against whose financial interests these gentlemen may be required to act? Not only is there a conspicuous want of uniformity in the pecuniary value attached to the services of a medical officer of health in different districts, but the want of any guiding principle leaves each local authority to suit its own convenience, both as to the class of officer it selects and the manner in which his services are remunerated. It is important that these anomalies in the working of the Acts, bearing as they do upon the general result, should be brought under the notice of the public, the profession, and the Legislature. We cannot but feel that the aspect of affairs is less encouraging than it was only a few weeks ago. Something very like a dead-lock has occurred in some localities, and in others there are tokens of wavering purpose and flagging zeal. It would be well if medical officers of health generally could be induced to speak out promptly and candidly in the professional press as to their difficulties. We shall be glad to hear their complaints, and strive to help forward the redress of their grievances.

THROUGH the indiscretion of a contemporary the private, but imperfect, official list of the names of some of the gentlemen who are candidates for the new Board of Examiners in Anatomy and Physiology at the Royal College of Surgeons of England, was made public last week. It is scarcely necessary to say that, although that list was well known to us, we did not, for one moment, think of publishing it, partly in consideration of the feelings of those gentlemen who had applied for the office of Examiner, and partly because the document itself was of a confidential nature. We, nevertheless, feel at liberty to make some general comments on the nature and character of the applications, and to discuss the general merits of the applicants. It must, however, be premised that some important names have now to be added to the first list which may very materially affect the ultimate issues of the election. On looking over the names we are forcibly reminded of the difficulty that we foresaw and pointed out in a recent number. The list contains a large number of anatomists, some of whom have obtained a high reputation, and the selection must necessarily be difficult where the claims of many are so nearly equal. A due but not exclusive regard to the principle of seniority, and to the necessity of choosing the examiners from different schools, so that the two larger ones shall not be over-represented to the prejudice of the smaller ones and of the provincial schools as at present, will be the main guides to a fair and judicious choice, and, so far as the anatomical portion of the Board is concerned, everyone will probably be satisfied. But with regard to the Examiners in Physiology the position is quite different. Most of those who will probably be selected for their anatomical knowledge have no special acquaintance with modern physiology, and in this respect their election will not make the new Board any stronger than the old one. There are only five candidates out of the twenty-one who profess to have taught, or who are teaching physiology, and among these there is no name of any teacher of eminence in that science, or of anyone who has qualified himself for such a post by any experience as an examiner elsewhere. In fact, the present Court of Examiners comprises two excellent physiologists in Messrs. MARSHALL and SAVORY, and it will be quite impossible to make the new Board as strong in this respect by any selection whatever from the present list of candidates. The reason is not far to seek. Most of the physiological teaching in the Medical Schools, not only of the metropolis, but throughout Great Britain, has been and is being done by physicians. The restriction of the new Board to Fellows of the College, although in accord with the conservatism of Lincoln's Inn, is evidently fatal to the scheme, which is otherwise a most satisfactory one. The only Fellows of the College who have been appointed examiners in physiology at the London University in recent years are Messrs. SAVORY and POWER, and the new Board will apparently not secure the services of either of these gentlemen. If the selection be made from the published list of candidates only, as much dissatisfaction as at present, or even greater, is sure to prevail among those who present themselves for examination, especially at the Primary Fellowship, where a full and accurate knowledge of the present state of physiological science should be a *sine qua non* on the part of anyone who is placed in so responsible a position as that of examiner therein.

As we have already suggested, it is highly desirable that at least two gentlemen should be appointed to examine in Physiology only; and unless this be done it is certain that the new regulations will have the effect of making the necessity for a Conjoint Board of Examiners the more apparent.

DR. FRANKLAND reports that, owing to the heavy floods, the river water during November was polluted with "large quantities of suspended impurities and of soluble organic matter of brown colour." The five water companies drawing their supplies from the Thames delivered throughout the month water which was quite unfit for domestic use even after efficient filtration. The Grand Junction water gave a deposit consisting mainly of matted fungoid fibres. The Kent Company's water was, as usual, good and palatable.

Annotations.

"Ne quid nimis."

OVERWORK AT SCHOOLS.

SINCE competitive examinations have been regarded as affording the surest test of individual capacity, they have multiplied in all directions, and increased in severity. And as, in England at least, a reputation once made is rarely lost except through grave delinquency or manifest failure of power, we cannot be surprised that every endeavour should be made to attain, at as early a period as possible, the success by which future position is to be secured. Formerly, when competition was limited to the struggle for a college scholarship or a place in the university class-list, and the army, navy, civil service, and East India Company's appointments were only to be obtained by interest, schools were selected on different principles than are now recognised: we are speaking rather of private than public schools. Then more regard was paid to the plan and method of education, and almost every school possessed in this respect an individuality of its own. At the present time the object of education appears less a matter of steady training and the patient laying of solid foundations, than a system of successful cramming, and a school seeks for reputation more in the number of public prizes annually won by its scholars than for the soundness of its scholarship. We do not intend, however, on the present occasion to enter into a discussion of the general merits or demerits of the competitive system, but simply confine our remarks to its effect on school work.

For a considerable period after the first introduction of the competitive system the great public schools made no effort to extend their system of education. Consequently large proprietary colleges, such as Marlborough and Cheltenham, were founded in order to meet the new requirements. These establishments differed only from the public schools in affording facilities for the study of the extended range of subjects required for the public competitive examinations, the traditions and method of the older schools being, however, still closely adhered to. The success and popularity attending these proprietary colleges led to the establishment of others, though not on such a sound basis, and the multiplication of so many institutions, all struggling for fame and existence, has led, we fear, to the introduction of a very unsound system of teaching. The smaller and later founded establishments, not possessing the *prestige* or reputation of the older schools, have sought to compensate for these deficiencies in increased efforts to secure success at examinations by putting increased pressure on the boys under their charge; and in order to get lads of special promise into these establishments, inducements are offered in the shape of scholarships or reduced terms—baits too eagerly swallowed by parents of straitened means. We have examined the prospectuses of many of these schools, and we have generally found the hours of work to be excessive, ranging from forty-five to forty-eight hours a week, which give a daily average on four whole school days of eight to nine hours, and six hours and a half on two half-holidays; this calculation does not include the Sunday school-work, which may be fairly reckoned as three additional hours. Eight hours a day of mental work is a considerable strain even for an adult; how much more for mere children, who have also to expend so much force to meet the vital requirements of the growing frame. Moreover, in adult life, the work, being more mechanical, is accomplished with less intellectual excitement than is the case where fresh facts and new ideas are constantly being acquired. If the pressure came at the later period of school life, and was permitted only for a few months immediately previous to an examination, we should perhaps have little cause to complain; but, unfortunately, the whole school career is one prolonged struggle. We cannot but regard the establishment of entrance scholarships at schools as a great evil, and as a most injurious extension of the competitive system. So long as the examination and the class-list closed the school career little mischief might be done, and time afforded for deliberate and sound study; but how can that be possible when before the boy is well out of the nursery he is put in harness, and driven along certain grooves in order to snatch a premature success which if attained only commits him more firmly to the grinding system. The world is acquainted only with the brilliant and successful side of the present system. It sees duly advertised in the public press that at Mr. So-and-So's school so many candidates have passed into the Civil Service or the Army, or have gained cadetships at Woolwich, and it does not stop to inquire at what expense these triumphs have been won. How many have broken down in the training, and how many have been hopelessly discouraged? Much of the responsibility rests with the parents who countenance this practice, and who do not see that this untimely forcing can only in the end yield a sickly and feeble fruit. Parents who do not wish their sons to be sacrificed to the Moloch of "early success" should jealously scrutinise the prospectuses of the schools to which they send their boys, and if the working hours are found to be excessive, the school should be avoided. As a general rule it may be stated that thirty-five hours of school work a week for boys under fourteen, and forty-two hours for boys above that age, is as much as the health and strength can fairly stand; whilst the success that still attends the old public schools, who rarely exceed these hours, shows that they are amply sufficient for educational purposes.

MILITARY MIDWIVES.

A CORRESPONDENT has lately called attention to a subject which, on the ground of humanity if on no other, deserves consideration—namely, the provision of properly qualified midwives for attendance on the wives of soldiers as a substitute for those women who, without the rudiments of the art they profess, are permitted to call themselves midwives, and practise in barracks. Our correspondent's communication has special reference apparently to the case of the Royal Marine Artillery, which is, we are informed, under the Admiralty, and not the War Office; but it is unquestionably the duty of the authorities, whether naval or military, to ensure that the lives and safety of soldiers' wives be not jeopardised in their confinements. A number of properly trained midwives should always be available to meet the requirements of a garrison or regiment as the case may be. Since Lord Herbert's time considerable efforts have been made to secure something like decency and comfort for unfortunate women under such circumstances by the erection of a number of small lying-in hospitals at military stations, and these have been to a certain extent utilised for educating women to become nurses. But the great and prominent worker in this direction has been Dr. E. B. Sinclair, King's Professor of Midwifery in the School of Physic in Ireland, Trinity College, Dublin. Dr. Sinclair, having once served as a medical officer of the Royal Scots, no doubt had his attention forcibly directed to this great want, and it falls to the lot of very few men to have achieved a larger amount of practical good than he has done. He may claim to be considered a public benefactor as far as the army is concerned, for from 1869, when a school for training army midwives was formed in connexion with Sir P. Dun's Hospital, to the

present time, he has sent no less than 271 well-trained midwives and ladies' nursetenders for service in the army. From the prospectus of this institution we gather that the course of instruction is ample, practical, and excellent of its kind, and that it is open to the wives of soldiers and non-commissioned officers to obtain their education free of expense. We notice that it is under the direct patronage of Her Majesty, and with the sanction of His Royal Highness at the head of the army, and we are led to wonder whether any other recognition of Dr. Sinclair's services has been vouchsafed him than the privilege of using the names of Royal personages as patrons of his good work.

THE LOCAL GOVERNMENT BOARD: COMPULSORY LOCAL HEALTH SELF-GOVERNMENT.

THE capacity of the Local Government Board in muddling the most straightforward matters amounts almost to genius. We have now some more definite details of the course it is taking in bringing into force the 286th section of the Public Health Act, 1875. This section gives the Board powers to combine districts for appointing a medical officer of health. When this section first appeared in the Bill, we pointed out that it was an unmistakable confession of failure of Mr. Stansfeld's so-called "policy" in one of its most important details; and when it passed through the House of Commons with the approval of Mr. Stansfeld—at least with no expressed dissent from him—we commented upon its irreconcileability with that "local health self-government" which he had vaunted, and which Mr. Sclater-Booth accepted as his aim and end. Mr. A. Doyle, one of the general inspectors of the Board, who had the privilege of first illustrating the muddle of the Board's administration of the Public Health Act of 1872, has apparently been conceded a like privilege with regard to the Act of 1875. He was at Wrexham the other day, bent upon a project of combining the counties of Denbigh and Flint into a single district for a medical officer of health, and this was his process of inducing the several sanitary authorities to assent to this combination. First, he told them that when, in 1873, he had submitted a like project to them, which had been rejected, he foresaw that the choice would be taken from them. This had been accomplished by the Act of 1875, and they were now in this position that their assent to combination was quite immaterial, for the Local Government Board were quite prepared to carry out such projects of combination as it might think fit to adopt on the recommendation of its general inspectors. When it was not unnaturally asked why he then consulted the sanitary authorities on the subject, and gave them the trouble of meeting to confer upon a question they had no control over, he curtly replied that if he hadn't done so he would have been held discourteous, and that the Local Government Board would prefer having their assent to its action, although it was determined to act without it (the politeness of the headsman before decapitating his victim). If they thought fit to kick they might do so, but he warned them that it would be a useless and expensive process, involving much legal trouble, and would benefit nobody but the lawyers engaged. Speaking to a Committee of the Wrexham Town Council, Mr. Doyle is reported to have said: "'Must' was the last word he liked to use in the presence of gentlemen connected with local administration, but 'must' was the only word that would suit this case." This is "local health self-government" with a vengeance.

But this is, after all, the least, although locally the most aggravating, part of the business. Mr. Doyle told the Wrexham Town Council that the Local Government Board would in due time issue an order defining the duties of medical officers of health for large combined districts; also the duties of such assistant medical officers who might be appointed within these districts. We have more than once pointed out that the existing regulations of the Local Government Board as to the duties of medical officers of health were treated as a dead letter by the general inspectors of the Board. But here we have the Board urging the formation of districts for the appointment of officers, and requiring the assent of local authorities to them, the duties to be performed in these districts not having yet been made known or determined upon! The Board itself affects to judge of, and requires the approval of local authorities to, an organisation the fitness of which can only be determined by a knowledge of the duties for which it is made, but of which the duties are not yet known. This the general inspectors of the Board designate a policy of common sense. A course like this, which must postpone a sound local health sanitary administration indefinitely, can only be expected to be successful by its audacity.

The Wrexham Town Council has refused to be brow-beaten by the Local Government Board, and has determined to oppose the combination of the two counties. It is absurd to suppose, Mr. Doyle notwithstanding, that a court of law or Parliament would ratify a compulsory order of the Board for an organisation, the purposes of which the Board itself has not defined by setting forth the duties of the medical officers of health, which would be preposterous in view of the existing regulations as to such duties, and which, until these duties be defined, cannot be rationally discussed.

SEASONABLE WEATHER.

THERE are some people who hail the appearance of what is termed seasonable weather as a source of congratulation, and pride themselves on taking brisk exercise in all weathers, and never coddling. And, no doubt, to a man who can take his cold bath every morning with a relish (he has, perhaps, a fire in his dressing-room), who can eat a hearty breakfast (and has a good breakfast to eat), and start off in his Ulster, the present weather is not so disagreeable. It rouses him to take active exercise, sharpens his appetite, and, as he says, "pulls him together." But there is another way of looking at the weather, and it is the way, unfortunately, that most people have to regard it. An old officer, after dining at his club and sitting by his club-room fire, turns out into the street and meets a keen north-east wind; if his pulmonary and circulatory organs are not in fine working order, he contracts a bronchitis, and a rapid congestion of the lungs soon gives rise to that promotion which his juniors had almost despaired of from his having so long blocked the way. Or an individual who has long lived "regularly but well, Sir,"—that is, he has lived a trifle too well—finds that the same wind suddenly checks the action of his skin, and his liver or kidneys, which had already been working at high pressure, do not accommodate themselves to the extra amount of duty suddenly thrown upon them, and an attack of gout or sciatica is the result. The snow-sodden boots of children and the keen frosty air speedily develop chilblains; and the biting wind is a terrible test to everyone's weak places. The physician endeavours with infinite pains, and by the aid of his various appliances, to elicit information as to the nature and seat of his patient's disorder, but this weather soon makes manifest the weak and vulnerable places in a patient's system. The hitherto latent affection of a lung is suddenly developed into activity, and the north-east wind finds out the stopping in a tooth, or searches out the ends of all the nerves at all disposed to neuralgia, and it causes the benumbed and chilblained fingers of the pianist to lose their cunning. Your dark olive-complexioned man, regular at

his desk in the city, but irregular as to exercise outside his office, finds himself suffering from a violent bilious attack attended with shivering, nausea, headache, and loss of appetite, and has to wrench himself from that desk to which habit has so long chained him, and about which he has boasted that he was "always to be found there at his work, Sir." If such be the evils to which the rich and well-to-do are exposed, what must be the sufferings and privations of the poor! If anyone will only attempt to realise what it is never to feel warm—and there are many poor women, and very old and young persons especially, who never know what it is to be warm,—he will have some idea of what the poorer classes undergo during the seasonable weather of which we have been tasting a specimen. When they become ill the hospital or the workhouse is open to them, and they look forward perchance to death as to a prospect of relief from physical suffering at any rate. Seasonable weather is a melancholy practical application of the Darwinian dogma; the fittest only survive in that terrible struggle for existence through which so many have to pass during the rigours of an English winter.

A COUNTY COURT JUDGE ON MEDICAL CHARGES TO WORKING MEN.

JUDGE SMITH, of the Hereford County Court, has the merit of decided views on the subject of medical charges to working men. A case came before him the other day in which Mr. Thomas Mason, surgeon, of Wellington, Hereford, preferred a claim against William Woodhouse, of the same village, for professional attendance on Woodhouse's family, affected with fever, living two miles away. His charge was 3*s.* 6*d.* a visit. The whole sum claimed was £12 15*s.*, which included a charge of 7*s.* interest. The defendant admitted owing the sum of £11, but disputed the balance. Three and sixpence a visit, his Honour said, was too large, especially in the case of an ordinary labouring man, and he could not allow more than half-a-crown. He had one rule for medical men which he always laid down. It was this. A doctor was entitled to a minimum charge per visit of half-a-crown. If the visit had to be made to a distance the charge would be 1*s.* per mile inclusive. For instance, if a medical man had to go ten miles he would be entitled to 10*s.*; if he went five miles he would be entitled to 5*s.*, and so on. The minimum would, however, always be half-a-crown. Mr. W. Boycott, who appeared on behalf of the plaintiff, pointed out that at each visit where he had charged 3*s.* 6*d.* Mr. Mason had been obliged to drive two miles. Was he entitled to half-a-crown only for such service? His Honour replied that had he not fixed a minimum of 2*s* 6*d.*, Mr. Mason would only be entitled to 2*s.* The plaintiff said it would be impossible to work for such a sum. The prices of everything had risen so much that a medical man could not possibly support himself with such charges. His Honour replied that he could not allow more, and that the present bill must be taxed by the registrar and reduced by the scale he had named. When this had been done judgment would be given for the amount.

The Judge's view of a minimum charge is not to be complained of; but it is strange that, with so just a basis of reasoning, he should come to such a lame conclusion. In his judgment he makes no allowance for the three elements of *distance, more than one patient, grave and infectious character of cases.* We will not say that 2*s.* 6*d.* per visit might not be a sufficient allowance for the judge to sanction, but we are bound to say that it could be no adequate remuneration to the medical man, and that nothing could justify such a low allowance in the circumstances but the inability of the defendant to pay more, which was not proved or even alleged.

THE CASE OF SURGEON SPURWAY, LATE OF H.M. ARMY.

WE have received a copy of the correspondence that took place between the head of the Army Medical Department and Mr. Spurway whilst in that branch of the service, in reference to the latter officer having been gazetted on half pay without half pay for a period of six months. Indignant at this proceeding on the part of the War Office, Surgeon Spurway very naturally took the further step of declining to hold her Majesty's commission under such circumstances, and accordingly sent in his resignation, which was accepted. The facts of the case, as contained in the document before us, have already received a good deal of attention and discussion, and may therefore be assumed as pretty well known. It is not disputed that Surgeon Spurway had served as a medical officer for ten years, during all of which time he had maintained an unblemished reputation; that he returned from India in consequence of an affection which, if not induced by that climate, was nevertheless aggravated by it, and that he was at the end of six months' sick leave officially informed that, there being no regulation under which he could be granted half pay, because his disability was not contracted *in* and *by* his service, it had been determined to place him on the half pay list for six months, but *without half pay.* It is, moreover, not denied that officers who have left the service on account of misconduct have been granted a reduced or temporary rate of half pay under the clause of a Warrant which is declared to be inapplicable to Surgeon Spurway's case, although it would certainly appear to anyone reading it to have been expressly drawn up to cover all those cases not provided for by a previous clause in the same Warrant. If the copy of the communications before us embody all the facts that are really relevant to the case, and if Mr. Spurway can substantiate the position he has taken up in his communications—for we need scarcely add that all turns on this,—he has a strong case against "the authorities," be they who they may; and as this matter of half pay without half pay must affect other officers besides Mr. Spurway, we would advise him to get the subject taken up in the House, in order that we may know who is answerable for the course that has been taken, and, in fact, all about this matter; and it might be well to be informed at the same time how it is that regulations are drawn up so as to express what is not intended, and conceal what is.

THE HARVEIAN LECTURES.

THE first Harveian lecture at this Society was delivered by Dr. Sibson on the 2nd inst., when, in spite of the inclement weather, a large audience assembled. Taking for his subject "Bright's Disease and its Treatment, considered mainly in relation with Arterial Tension from Blood-contamination," the lecturer in the first place dwelt at considerable length upon the results obtained by the post-mortem examination of 277 cases of Bright's disease, with special reference to the size of the heart. From this analysis he drew the following broad conclusions. That in the large majority of cases of renal disease, whether acute or chronic, there is enlargement of the heart, chiefly hypertrophy of the left ventricle. That the degree of enlargement varies according as the disease is associated with other wasting affections, in which case the organ is found to be of natural size, or even small. Thus, in 9 cases of acute Bright's disease (non-scarlatinal) the heart was small in no case, of natural size in 2, both of which were associated with wasting disease; rather large in 3, and very large in 4. In 5 scarlatinal cases 2 presented hearts of the normal size, and in 3 the heart was rather large; but of 54

examples of the large white kidney in 15 the heart was small, 13 of the cases being associated with wasting disease; in 17 the organ was of natural size, 12 being associated with wasting disease; in 8 the organ was rather large, and in 14 much enlarged. Of 106 examples of the contracted kidney, the heart was small in 4, all being associated with wasting diseases; of natural size in 25, 18 being combined with wasting disease; in 20 it was large, and in 60, or 56 per cent., greatly enlarged, and this although in 21 of the cases there was wasting disease or emaciation. He adduced other facts on the same head, into which we cannot enter now, and pointed out the effect of arterial degeneration in modifying these results. Turning to the clinical evidences of arterial tension, Dr. Sibson enumerated the characters of the pulse, the evidences of enlargement of the aorta, and the presence of reduplication of the second or of the first cardiac sounds; the former heard over the conus arteriosus, and the latter over the ventricular septum; and he related some striking examples of these signs, most of which are present even in acute cases. In fact, in the acute cases the signs of arterial tension are better marked and of more certain value than in chronic cases where other influences come into play. Dr. Sibson proposed to leave the consideration of the sphygmographic tracings of the pulse, and the bearing which these facts had on the treatment of the disease, to the second lecture, which was announced to take place on the 9th inst.

SANITARY MEMORIALS OF MILLBANK.

As the vast prison that adorns the northern bank of the Thames, near Vauxhall Bridge, is shortly to be demolished, we may fitly recall to the notice of our readers the sanitary experiences that have been gleaned within its walls. The building was erected in 1812–16, and the site is described as about the worst that could have been selected, the neighbourhood being marshy and the soil a quagmire. The foundations were consequently so insecure that, shortly after the establishment was opened, three of the angle towers sank and sealed up the passages, so that the warders could not open the doors. Six years after it was found that the general health of the prisoners began to decline, and in 1823 what is known in prison statistics as the great epidemic made its appearance. This epidemic consisted of a severe and widespread outbreak of scurvy, followed by a most obstinate form of dysenteric diarrhœa. Spongy gums, ecchymosed and blotched legs appeared, and before long half the prisoners were affected, the women being more severely attacked than the men. Some few, however, were entirely exempt, and notably those employed in the kitchens, while it was found that among the staff of officers, who with their families numbered 106 persons, not one was affected. Soon after the commencement of the outbreak Dr. Roget and Dr. Latham were consulted respecting the nature of the disease. It was speedily found that, owing to some severe Parliamentary criticisms as to the extravagant and "fattening" scale of diet in vogue, a crucial and, as it proved, a most unhappy reform was effected. Solid animal food was entirely excluded from the scale, the bread was reduced, and no potatoes were given. This evident exciting cause of the outbreak was probably aggravated by cold, for those who occupied the coldest cells suffered most. The diet was changed, meat, vegetables, and oranges were given, and the patients lost their scorbutic and also the diarrhœa. But in the summer of 1823 dysenteric diarrhœa again appeared, and affected officers, servants, and all alike. It was found, by reference to the apothecary's books, that chalk-mixture and laudanum had been frequently prescribed for some time previously. The ordinary astringents, however, in this outbreak were unsuccessful, and, after a partial success with mercury and some other remedies, it was decided to empty the prison. In May, June, and July of the year above quoted, the number of cases on the sick-list rose to 454 out of a prison population of 800 persons, and 30 deaths occurred. The prisoners were removed to the Royal Ophthalmic Hospital, then in Regent's-park, and to the hulks off Woolwich, and all quickly regained their health, though it appeared that the Woolwich detachment convalesced more rapidly than the others, whereas the few left at Millbank for some short time showed no improvement. It was therefore resolved to confer a free pardon on the female prisoners, and transfer all the men to the Woolwich hulks. This was done, the disease quickly disappeared, and after a few months the prison was re-occupied. Some years ago a slight outbreak of scurvy again occurred, but, with this exception, the prisoners have been maintained in a fair average state of health. Many other particulars of the great epidemic may be found in a Blue Book on the subject, published in 1823, in Latham on the "Diseases of the Penitentiary," and in "Memorials of Millbank," a very interesting book that has recently appeared from the pen of Captain Arthur Griffiths, deputy-governor of the prison.

WESTMINSTER HOSPITAL.

THE long-talked-of improvements in the sanitary condition of this hospital have at length assumed a definite form. On the 16th of March last, a sub-committee, consisting of Sir Rutherford Alcock (as chairman), Dr. Basham, Mr. Brooke, Mr. Cowell, Mr. Richard Davy, Dr. Dupré, Dean Stanley, Mr. Charles Hood, Mr. Helmore, and Mr. W. Gilbert, was appointed to consider the whole question. This committee has, with the valuable assistance of Mr. Hunt, C.B., and of Mr. Stephen Salter, as architect, recently presented a full and exhaustive report, which was accepted on Tuesday last by the House Committee, and referred to a general board of the governors in January next for final consideration.

The recommendations of the sub-committee are briefly as follows:—The addition of octagon towers in front and angle buildings behind, by which the whole of the sculleries and watercloseets will be placed outside the building, with a connecting lobby entered from the several wards and cross ventilated; the addition of consultation and retiring rooms to the operation theatre; the erection externally, so as to be entered from each ward corridor, of bath and lavatory rooms; the addition of a new floor to part of the building, to provide wards for the accommodation of infectious and delirious patients; a complete system of ventilation by perpendicular tubes in each ward; besides many other improvements, such as alterations in the out-patient department, painting and colouring the hospital throughout, improving the mortuary, &c. These important alterations are estimated to cost nearly £8000, and will, it is hoped, be carried out next summer. The towers and buildings outside can be constructed first, so that the hospital will not require to be closed for more than six or eight weeks.

THE PRINCE'S TOUR IN INDIA.

THE detailed accounts of the doings of His Royal Highness at Bombay, of which the telegraph had already briefly apprised us, have since reached this country. While it belongs to other journals to describe the splendour and variety of the scene which the city of Bombay presented, and to chronicle the vast political influence which the Prince's visit may exercise over the future history of India, we have to congratulate the nation on having so little to say in our pages from a medical standpoint. Monotony is not ordinarily the source of gratification that

it is in the present instance. Our written intelligence, transmitted by the mail which left Bombay soon after the arrival of the Prince of Wales there, carries our previous information of the voyage of the *Serapis* onwards from Aden to Bombay, and it is to the effect that the Prince and all on board were well; indeed, to employ nautical phraseology, there was a clean bill of health, no one belonging to the Prince's suite being on the sick list. The *Serapis* made an excellent passage from Aden. It became cooler out of the Gulf of Aden, the thermometer falling to 78°, 80° F., with a pleasant N.E. breeze, which continued all the way; but the heat became greater at Bombay, being 82° and 83° F. on the 8th ult. The Prince was in remarkably good health and spirits, and, according to the then existing programme, His Royal Highness was to remain in Bombay until the 17th, when it was intended to proceed to the south to Beypore. The shooting expedition to the Annamully hills had not been finally settled, but depended upon the receipt of positive assurances as to the freedom of those parts from disease. Apparently nothing could have been more prosperous than the Prince's tour so far. His Royal Highness's public reception at Bombay was a most magnificent spectacle, and as far as human foresight and medical experience are concerned, the nation may confidently expect the Prince to be protected from all avoidable risks to health until the time of his return, when we anticipate seeing His Royal Highness all the better for his Eastern tour.

THE REGISTRAR-GENERAL'S HOSPITAL STATISTICS OF SCARLET FEVER.

STATISTICS are valuable in proportion as they are correct. To be able to decide upon the value of statistics requires a knowledge of facts, and of how to use them. Therefore, it is a favourite device of those who do not possess these qualifications to lose no opportunity for disparaging the value of statistics. The Registrar-General recently published some statistics upon the mortality of scarlet fever cases in the Metropolitan Asylums Board hospitals, which were full of interest, as the treatment of this disease on a large scale in hospital is more or less an experiment, the result of which has an important bearing upon the influence of hospitals for controlling infectious diseases. At a recent meeting of the managers of the Asylum District, Mr. Shaw Stewart unfortunately remarked that "he had no knowledge of where the Registrar-General might have got his figures, but he was prepared to say they were not correct." *Apropos* of this remark, our contemporary the *Pall Mall Gazette*, in a sham panegyric on the value of statistics, remarked that "they have the immense advantage over common sense and experience that they are capable of adjustment to almost any extent." It undoubtedly requires a large share of common sense to estimate the value of statistics, which are, after all, little more than tabulated experience; but it is difficult to see how mere common sense is to decide on such points as the value of hospital treatment for stamping-out scarlet fever. As to the point in dispute between Mr. Shaw Stewart and the Registrar-General, it appears somewhat remarkable that Mr. Shaw Stewart should have had any doubt as to the source of the Registrar-General's figures, since that official has from the beginning of the year been regularly supplied by the managers of the Asylum District Hospitals with copies of the weekly returns furnished by the medical officers of the institutions. Uninformed as to the source of the Registrar-General's figures, it is only reasonable to suppose that Mr. Shaw Stewart is mistaken in supposing that they are incorrect. Indeed, returns since published by the managers relate to the mortality of all patients in the Asylum District Hospitals in the six months ending September, whereas the Registrar-General's figures related to scarlet fever alone during the first nine months of this year. This is probably the explanation of Mr. Shaw Stewart's blunder.

THE LAST APPOINTMENT TO A CORONERSHIP.

DIFFERENT people entertain different opinions as to the qualifications requisite for a coroner. A legal training is held by some, just as a medical training is held by others, including ourselves, to be the best qualification for that office; but the electors in Suffolk have taken their own view of this matter, and a very original one it is, we must say. They have elected an auctioneer as their county coroner! And it was not that the electors were restricted in their choice by the limited number of candidates for the office; for at least one member of the medical and two or three of the legal profession, one of the latter being the deputy coroner, were among the candidates. The election seems to have been of a purely political character, and Mr. Chaston (the auctioneer) at a very early stage of his canvass is stated to have secured the support of several persons of influence among the county Conservatives. The use of an auctioneer's rostrum and hammer, and familiarity with the best methods of inducing people to bid for lots in an auction-room, would not appear to most people the best training for a judicial office; but the electors of Suffolk thought otherwise. The result of this election would be ludicrous were it not lamentable; and we are reluctantly compelled to inquire whether the time has not come for remodeling the system by which coroners are elected. It would be infinitely preferable to make the Lord Chancellor responsible for nominating coroners than to have their election sink into an affair of party politics, with all the concomitants of canvassing, cabs, committee-rooms, and placards.

THE DRAINAGE OF LINCOLN.

THE Corporation of Lincoln have received a notice from their engineer, Mr. Mansergh, demanding a settlement of his account for work done in preparing schemes of drainage for the town. "If," says Mr. Mansergh, "the Council intends to set the Local Government Board at defiance, and the carrying out the works is to be indefinitely postponed, I shall request to have a payment made on account of what has already been done; or if they prefer to employ some other engineer they are quite at liberty to do so on *the settlement of my account*." Mr. Mansergh writes thus plainly because he thinks "after nine years' delay, it is time some decision should be arrived at, and that he should be assured, so far as he is concerned, that the matter is either to proceed or be dropped." Mr. Mansergh's letter seems to have caused some consternation and surprise amongst the members of the corporation, but after discussion it was decided "that Mr. Mansergh be requested to send plans, sections, detailed drawings, specifications and estimates, and draft contracts for the proposed works of sewers and sewage disposal, in order that they may be investigated by the Council prior to tenders being invited; the Council being of opinion that they would not be justified in committing their constituents to so large an expenditure as that involved in carrying out the proposed works without the fullest previous investigation." In this resolution we have an instance of the craft which has enabled this "ancient municipality" to set at defiance, for so long, the mandates of Gwydyr House. The corporation have already spent nine years in making "previous investigations" with respect to drainage schemes; and in asking more time for a consideration of Mr. Mansergh's estimate, which has been before them since Oct. 2nd, 1873! they are only repeating the tactics which have been so successful with the Local Government Board. We prophesy, unless

Mr. Mansergh presses his point with firmness, that the settlement of his account, and the plans for the town drainage, will both be "indefinitely postponed."

MICRO-PHOTOGRAPHY.

THERE can be no doubt that histological advances are considerably hampered by the necessity of having the microscopical characters drawn by the observer himself. He can only convey upon paper the impression that he has formed of the object, and however faithful may be his representation, it must necessarily lack completeness. The application of photography to the microscope obviates this difficulty, but only to raise others equally objectionable. The photograph is too faithful a representation, and too often results in a blurred and confused picture. Dr. Luys, who has for some time devoted himself to the subject, in the current number of Brown-Séquard's *Archives*, advocates the use of this method, and illustrates his paper by a photograph prepared by a new process of a section of the cortical matter of the cerebrum. But we are bound to say that the specimen thus given does not appear to us to aid the histologist. At the last meeting of the Medical Microscopical Society (which, by the way, is by no means so well attended as it should be), Mr. G. Giles gave a clear and interesting description of the means he has adopted to ensure good results in micro-photography. We need not here enter into a full description of his apparatus, except to mention that it is so arranged that the camera is directly connected with the microscope, the light being thrown on the object by means of a three-inch condensor, with ten inches focal length. Mr. Giles showed a large number of photographs of histological (normal and morbid) specimens, some of which were certainly most excellent representations. As Mr. Giles stated, the great difficulty lies in the fact that in the photograph only those parts of the field that are precisely in focus come out clearly, so that in every picture parts of the object are less distinct than others. But it is possible that this difficulty may be overcome, and we hope that Mr. Giles will continue his efforts in this direction. Simplicity and rapidity are, of course, very essential points, and if these be attained much labour will be saved, and great accuracy in histological research ensured.

FEVER IN ROME.

THE health of Rome during the winter is a subject not entirely without interest in this country, especially to the migratory English who are able and glad to select for winter residence a more congenial climate than it is possible to enjoy in this island. According to official returns published by the Registrar-General, it appears that the annual death-rate in Rome during the six weeks ending 14th November, was equal to 37 per 1000, against 23 in London. The Roman death-rate, it is true, is reduced to 32 per 1000, by the omission of 183 deaths in the returns from that city during the six weeks, which are described as of strangers or non-residents; no such correction, however, is made in the London returns, which undoubtedly include many deaths of non-residents, as it is estimated by the Registrar-General that these deaths are more than balanced by the deaths of London residents occurring outside its boundaries. The principal feature of the recent Roman returns has been a marked increase in the fatal cases of fever, which, during the six weeks under notice, have numbered no less than 220, equal to an annual death-rate of 7·5 per 1000; whereas the fever-rate in London in the same period (exclusive of scarlet fever) did not exceed 0·4 per 1000; in other words, fever was nineteen times as fatal in Rome as in London. During the last of these six weeks the deaths referred to fever in Rome were 52, a considerably higher number than in any previous week this year, and included 29 described as "eruptive," 10 as "febbre d'assorbimento," 7 as intermittent, and 6 as typhoid. The term "eruptive fever," which includes the largest proportion of the total fever deaths, is far too indefinite to afford a satisfactory clue to the type of this fatal form of fever; neither is "febbre d'assorbimento" much more instructive. The death-rate from fever is, however, undoubtedly high, and, combined with the excessive rate from all causes, affords further conclusive evidence, were it necessary, of the unsatisfactory sanitary condition of Rome.

THE IMPERIAL BOARD OF HEALTH IN GERMANY.

A SUM of £800 has been put aside in the German Chancellor's budget for the establishment of a Supreme Board of Health for the empire. Judging from this small sum, the organisation cannot become a very extensive one. Its principal object will be to collect reliable statistics in sanitary matters, though there are hints that the new board will be a sort of sanitary court of appeal to which the district administrative boards or provincial governments will have to refer for sanitary advice and decision, so that immediate action would have to be taken after its judgment. In semi-official correspondence, the name of Dr. Struck, Prince Bismark's body physician, has been put forward as the future president of this new board, which is to be placed under the immediate control of the Chancellor, without an intermediate State Ministry. Dr. Struck was a private physician at Frankfort during Prince Bismark's stay in that city as envoy for the old German Confederation. He entered the army in 1866, was transferred to a regiment at Berlin, and is at present the regimental Oberstabsarzt of the first Grenadiers of the Guards.

THE LATE RIGHT HON. T. E. HEADLAM.

WE regret to announce the death of the late Mr. Headlam, the ex-member for Newcastle-on-Tyne, very honourably associated with the last successful medical legislation—that of 1858. We are indebted for the Medical Act to him and to Mr. Walpole, more than to any other two public men. It is neither unreasonable nor detracts from Mr. Headlam to suppose that for some of his ability to cope with this subject he was indebted to his uncle, the late well-known Dr. Headlam, of Newcastle-on-Tyne. Mr. Headlam continued until lately to feel an interest in the Medical Acts and their amendment, though his paternal feelings towards the Act of 1858 made him view with some jealousy other and more thorough measures of reform. This is little more than we should expect. A finality feeling takes possession of the best reformers. But this should not hinder us from doing justice to their contributions of help to a good cause, though we may not regard them as conclusive ones.

THE MARRIED SOLDIER IN INDIA.

THE married soldier is, as a rule, much better off in India than at home, and were it not for the loss of health which residence in a tropical climate entails on women and children, Indian service would for them also be far preferable. Of late years efforts have been made, no doubt, to improve the condition of the soldier in every way, but the soldier's family very often fares badly on home service. The Government of India laid down a scale of accommodation for married soldiers in 1864, by which each of them was provided with two rooms, one measuring 16 by 14 ft., the other 14 by 10 ft. This scale was fixed mainly with reference to quarters in the plains. According to the late Report of

Sanitary Measures in India, the accommodation for hill-stations has since been considered, and provision has moreover been made to some extent to adapt the size of the rooms to the requirements of large and small families. Each set of quarters is to have a bath-room attached, and the floor of the buildings is always to be raised one foot at least from the ground. We learn from the same Report that the statistics of sickness and mortality among soldiers' wives throughout India in 1873 presented a very favourable contrast to those of the previous year; and the children of European soldiers also suffered much less than usual during 1873. These favourable results do not seem, however, to be attributable to any general or special sanitary improvements, but to the fact that the year under report was an exceptionally healthy one in India.

DEATH FROM CHLOROFORM.

A RECENT death from chloroform in the practice of Mr. Chesshire, one of the surgeons of the Birmingham Eye Hospital, presents some peculiar features. The patient was a gardener, forty-two years of age, who had received a gun-shot wound in his right eye while beating for game on the 16th ultimo. The safety of the other eye being endangered, Mr. Chesshire recommended extirpation of the affected eyeball. Forty or fifty drops of chloroform were administered on a towel, and the patient "immediately became semi-unconscious." The operation was commenced, but the patient not appearing to be sufficiently under the influence of chloroform, forty or fifty drops more were given. Mr. W. M. Jackson, of Smethwick, noticing a failure in the patient's pulse, at once seized him by the feet and lowered his head. He afterwards practised artificial respiration, but the man died in about half an hour from the time of the first administration of the chloroform. The patient had no disease of the heart, and was free from excitement prior to the operation. It is remarkable how small a quantity of chloroform proved fatal in this case; probably not more than two drachms were used altogether, and every precaution was taken in the administration of the drug, and yet death resulted.

THE CAUSE OF THE FEVER EPIDEMIC AT CROYDON.

WE hear that an important discovery has been made with reference to the causation of the remarkable epidemic of fever in Croydon, which, if not affording the true solution of the mystery, at any rate offers a most reasonable suggestion for its explanation. A huge waste-pipe from the water tower of the Croydon Waterworks has been found to have had direct communication with the sewer. It is needless to say that this connexion, which afforded the utmost facility for aerating the water supply with sewer gas previous to delivery, has been effectually secured. The recent weekly returns of the Registrar-General show a decrease in the deaths from fever in Croydon, and we hear locally that the number of cases has considerably decreased.

RESECTION OF THE KNEE.

AMONG the young French doctors who visit the hospitals of London, some endeavour to acquaint their countrymen with English modes of practice which have not penetrated fairly into France. M. Picard has just been very successful in that way, and has published a pamphlet which offers a faithful sketch of the rise and progress of resection of the knee. The paper is almost exhaustive, and full of details and statistics of the utmost value. M. Picard has attended the large hospitals, and witnessed the operations and practice of some of our leading surgeons. He renders full justice to the perseverance with which this form of resection is being applied, and shows that careful dressing is of importance in these cases. The author is a great admirer of Lister's plan of treating wounds, and his glowing description will certainly tend to a more general adoption of Prof. Lister's views amongst French surgeons. M. Picard was assisted in his labours by Mr. Howse, of Guy's Hospital, who seems to have been particularly successful in resection of the knee.

A HINT TO THE HARVEIAN SOCIETY.

AT a meeting of the Accademia Medica di Roma on the 7th November, the president, Professor Maggiorani, in acknowledging the gift of the work in which Dr. Ceradini, of Genoa, claims for Andrea Cesalpino the priority in discovering the circulation of the blood, suggested that a monument should be erected in the University, to commemorate the discovery and its author. Professor Baccelli seconded Professor Maggiorani, and contended that Cesalpino anticipated Harvey in conceiving and demonstrating the fact of the circulation. To an Italian, therefore, and a professor in the University of Rome, the greatest physiological discovery of modern times was due. We hope that the Harveian Society will not allow this "revindication" to pass without challenge, and that our great English physician will find an effective "apologist." Italy has substantiated her right to priority in the transfusion of blood; it is too much when she claims to have been the first to demonstrate its circulation!

ZYMOTIC DISEASE IN KEIGHLEY.

THE small-pox epidemic in Keighley has only died out to be replaced by a still more fatal epidemic of scarlet fever. During the four weeks ending 18th November the medical officer of health reported that 23 deaths resulted from scarlet fever, being equal to an annual rate of 11·5 per 1000 of the estimated population of the local board district. Scarlet fever caused 10 deaths in the district in the first quarter of this year, 36 in the second, 18 in the third, and 36 in the first half of the current quarter, making 100 since the beginning of the year. This exceptional fatality from scarlet fever is attributed by the medical officer of health to the defective sanitary condition of the town, two-thirds of the streets being practically undrained, and, according to a recent report, 71 of the streets were unpaved. The members of the Local Board seem to be more intent upon disputing the reports of their medical officer than upon redressing the undoubted evils with which the town abounds. The medical officer of health has made a claim for extra remuneration for his indefatigable and thankless services during the late severe small pox epidemic, and the claim has been met by a paltry offer of £30 from the Local Board, which has not been accepted.

THE LAST THING IN THE WAY OF FORAGE ALLOWANCE.

AMONG the Army Circulars issued for the present month is one—clause 163—prescribing the conditions under which forage allowance is to be drawn for the future. These conditions are to come into force on the first day of the new year, and apply to combatant and non-combatant officers alike. In the first place, the horses of all officers whose duties require them to be permanently mounted must be *bonâ fide* their own property, to entitle them to forage allowance. One is tempted to pity the unfortunate officer whose duties require him to be permanently mounted in this weather. Still, it is tolerably clear what is intended by the term "permanently mounted," as contra-distinguished

from the position of those officers whose duties require that they shall be temporarily or occasionally mounted. These latter can draw forage allowance—at least so we read the regulation—so long as they actually possess a horse or horses of their own, and their duties entitle or require them to be mounted; or they can "hire a hack" and charge the cost thereof to the public, supporting their claims by vouchers; but the expense so incurred must not exceed that to which they would be entitled as forage allowance for specified periods of time. Now, it strikes us that in these days, when horses are very dear, an officer might not care to purchase a horse to provide for the performance of duties which might only last so long as he held a particular post, when he would have to maintain his horse at his own expense, or sell it to purchase a new one when required. And if he has recourse to the hiring process, he had better assure his life before crossing the back of some livery-stable animal, and riding it for the first time in the immediate vicinity of artillery practice.

THE Local Government Board, which recently held an inquiry as to a proposed new source of water-supply in Richmond, have granted powers to the Select Vestry to construct works. In pursuance of their powers, the Vestry have purchased the Old Brewery, with its deep wells in the chalk, and have accepted contracts to the amount of £25,000 for the erection of the works. It appears that the Local Government Board, when the matter was under discussion, declined to express any opinion on the legal points of the case, and, in consequence, the Southwark and Vauxhall Company have given notice to the Vestry that they are applying for an injunction to restrain their proceeding further in their attempt to provide Richmond with a pure water-supply. The London water company will probably succeed in putting the Richmond Vestry to a considerable expense; we trust, however, that their effort to maintain their monopoly will fail.

AT a recent meeting of the executive committee of the British Pharmaceutical Conference, a suggestion was made that the Conference should nominate, in connexion with the Cambridge University Extension Scheme, a Travelling Professor of Pharmacy, with a stipend of £150 a year, whose duties would be to lecture in the provinces at different centres. After discussing the proposal the committee appeared unanimously of opinion that at present it would be unwise to include the subject of education among the objects of the Conference. For the thirteen years of the existence of the Conference these objects have been the prosecution of original research in connexion with pharmacy, by means of publications and money grants, and the holding of annual meetings of members for the reading and discussion of original papers and for friendly intercourse.

IN London last week 1628 deaths were registered, including 59 from measles, 104 from scarlet fever, 16 from diphtheria, 54 from whooping-cough, 29 from different forms of fever, and 13 from diarrhœa. No death from small-pox was recorded. The mortality from diseases of the respiratory organs, notwithstanding the inclement weather experienced, was below the corrected weekly average number. The death of a woman aged forty-four years was referred to "morphinism." On Saturday the London Fever Hospital contained 109 patients.

WE have received a copy of the "Smallest Bible in the World" from the Oxford University Press Warehouse, Paternoster-row. It is printed in very small, clear type, on unbleached India paper, measures barely half an inch in thickness, and weighs when bound in morocco less than three ounces and a half.

THE recent meeting of the American Public Health Association at Washington seems to have been a decided success. The inaugural address was delivered by Dr. Toner, who strongly urged a close imitation of the manner in which sanitary reform is worked out in England, which he politely termed "the most enlightened country in Europe." The meeting extended over four days, and drew together a large number of the more prominent members of the medical profession in the States. There were in all thirty-two papers read—rather a plethora of communications perhaps for an association in the third year of its existence. Among other matters it was decided to memorialise Congress to introduce a better system of registering births, marriages, and deaths. The Association has the good wishes of all sanitarians in this country.

A LINCOLNSHIRE paper announces that enteric fever of a most virulent character has broken out in the village of Appleby. In one house where the disease has raged there is only one sleeping room for a man and his wife and seven children; in another cottage, one room divided by a wooden partition contains a family of eleven. The state of the wells and the privies would appear to be disgusting. Yet the village is within a short distance of the residence of one of the members for North Lincolnshire. We hope the sad state of his poorer neighbours has been brought under the notice of this gentleman. Self-interest alone would dictate the eradication of a pest spot in such immediate contiguity to his dwelling.

IT is with regret that we have to announce the death of Mr. William Acton. On Monday last, Mr. Acton was in his usual health, and in the evening of that day entertained some friends at Harley-street. He retired about one o'clock, and at half-past eight on Tuesday morning had, as usual, a cup of chocolate in his bedroom and was then apparently quite well. As he did not appear at breakfast, about half-past nine o'clock someone was sent to call him, but found Mr. Acton lying across the bath dead. Dr. Garrod was called in, but life was extinct.

A PAPER was read before the Society of Arts last week by Dr. Richardson "On Industrial Pathology, or the Influence of certain Injurious Occupations on Health and Life." From researches which had been made, Dr. Richardson was enabled to state that the rate of mortality is greatest among the class of persons who traffic in intoxicating liquors, and the principal cause of degeneration of working men was alleged to be intemperance. The lecture, one of a series to be delivered during the winter, was distinguished by Dr. Richardson's usual ability and effective delivery.

AT the last monthly meeting of the Halifax Town Council, by the adoption of the minutes of the Sanitary Committee, it was resolved that the plant, live stock, carriages, tools, and implements of every description, belonging to the Goux Manure Company in Halifax, should be purchased for the sum of £3500. This sum, it was stated, included a licence to use the system for the future as well as existing closets in the borough. It is evident that the Halifax Town Council has not yet lost faith in the Goux system of sewage-disposal, which is said to have hitherto worked well.

THE Leigh (Lancashire) Rural Sanitary Authority have found it necessary, from the alarming prevalence of scarlet fever in their district, to issue printed papers containing instructions as to the use of precautions against the spread of the disease. It appears to be particularly rife among the residents of Lowton Common, and to have assumed there a more than usually fatal character.

MR. JOHN LIDDLE, medical officer of health for Whitechapel, in a quarterly report on the state of his district, again invites attention to the subject of slaughter-houses. It is generally felt that something should be speedily done to remove the nuisances inseparable from the present loose system of slaughtering cattle. The existence of so many slaughter-houses as there are now in London, with the utterly inadequate supervision of the same, affords facilities for killing diseased animals and for the disposal of unsound meat. These evils would only be overcome by the erection of public abattoirs.

DR. BURDON-SANDERSON announces that the first of his annual course of lectures will this year be delivered at the University of London on Dec. 15th, at 5 o'clock P.M. The subject will be "The Pathology of Inflammation." The lectures will be given on alternate days at the same hour.

THE sanitary authority of the port of Sunderland are following the example of the City Corporation in organising a health department afloat. They have just appointed a sanitary inspector to visit and inspect vessels arriving in the Wear.

THE rate of mortality among officers of the British army throughout India was 12·55 per 1000 in 1873.

Correspondence.

"Audi alteram partem."

SANITARY WORK IN INDIA.

To the Editor of THE LANCET.

SIR,—With reference to your article on the "Prince of Wales and Cholera" and Dr. Sutherland's reply of the 27th ult. and 4th inst., the matter seems to me to resolve itself into the question, as to whether the action taken by the Royal Sanitary Commission has really led to the diminished death-rate of our European troops now serving in India. Dr. Sutherland remarks, that "at the time when the Royal Commission on the Sanitary State of the Army in India began its inquiry in 1859-60, the average death-rate among British troops in India was 69 per 1000 per annum. Last year it was a shade above 13½ per 1000"; and he argues that this change "is the most striking illustration of the effects of these improvements" (sanitary) on the condition of the Indian army. It seems to me, however, that before we can accept this conclusion we must take the following circumstances into consideration. Prior to the year 1859-60, the British forces in Bengal—and I would restrict my observations to this presidency—were almost constantly engaged in active service; and the Army Sanitary Commissioners are well aware of the fact that the casualties of a campaign in India arise in a much greater degree from the seeds of disease sown during the hardships of active service than from the bullets of the enemy. Since 1859-60 our army has led a life of ease and comfort in their barracks; and, in consequence of the extension of our system of railroads throughout India, the troops have been saved from the fatigue of long marches, formerly made during the cold season of the year, in the ordinary course of the annual relief.

From causes which it is unnecessary for me to describe, the Queen's regiments in India, prior to 1859-60, were frequently detained in the country for some years beyond the time allotted to them by the regulations of the service; and three European regiments and the whole of the Artillery were enlisted for local service, and these troops never left Bengal.

Then, again, there having since 1859-60 been no urgent necessity for filling up the ranks, the greater number of men enlisted for the service have been carefully selected before entering the army, so that a remarkably healthy set of young fellows have been sent out to India; and their period of service in the country has been curtailed of late years.

It is necessary also to take into consideration the conditions under which our troops are now invalided, as compared with the practice formerly followed in this matter. For instance, in 1861 the death-rate of British troops in India was some 37·74 per 1000, and the invaliding 31·68 per 1000; but in 1868 the figures were respectively 21·71 and 67·7 per 1000. Changes of this kind in the practice of invaliding sick men from India must evidently exercise a considerable influence on the death-rate of the men remaining in the country. Soldiers who would otherwise have died there are sent home.

Lastly, in estimating the difference between the present and former mortality among our troops, we must take into consideration the fact that the medical treatment of the sick has improved of late years; for the medical school at Netley raised the standard of education among young army surgeons; and it is only during the past fifteen years that large doses of ipecacuanha have been administered with such marked advantage in cases of dysentery, and quinine given in curative doses for the relief of malarial fevers.

Before we can, therefore, determine the amount of credit due to the Army Sanitary Commission for the diminished mortality among our troops, we must decide how far these favourable results are attributable to the fact of our soldiers not having been engaged in active service for some years past, to the alterations that have taken place in the system of invaliding our troops, to the greater care employed in selecting them for the service, and the improved methods of treating them when on the sick list.

The Army Sanitary Commissioners have doubtless exerted themselves in preventive measures against our troops being exposed to the contagion of syphilis, and they must receive all the credit due to them for their successful efforts in this direction.

It seems to me that we may form some notion of the influence exercised by the above-mentioned causes on the health of our soldiers in India by examining into the health conditions of their wives and children. These latter have never been affected by the perils of war; they are not usually invalided when sick, nor are they selected lives to start with on joining their regiments, but they are sanitarily cared for in precisely the same way as their husbands; and, on turning to the last report of the Sanitary Commissioner with the Government of India at my disposal (1872), I find that in the Bengal army the death-rate among the European women in India amounted to 46·12 per 1000, and that of their children to 112·95 per 1000.

I will not enter on a discussion as to the communicability of cholera through means of drinking-water; but I cannot help thinking it would have been well if the Royal Sanitary Commission, acting on the authorities in Bengal, had followed the lead of Mr. Simon and Dr. Parkes regarding the supply of drinking-water consumed by our troops. That such has hardly been the case, at any rate so late as the year 1871, we learn from the following order issued by Lord Napier. He remarked that, "so long as the existing procedure of conveyance in mussucks from different sources, and the storage in numerous receptacles, at all times more or less open to pollution of dust or dirty vessels, exists, so long is it fruitless to expect anything but comparatively foiled results." This remark by the Commander-in-Chief was made ten years after the Royal Sanitary Commissioners had commenced their work in India.

I can only add, that I do not know of a single cantonment in Bengal (excluding the Presidency) in which an efficient system of drainage or water-supply has been introduced. The sanitary state of the civil population has not improved, and in certain districts it has degenerated during the last fifteen or twenty years; and it is remarkable that although a deadly fever raged from 1861 to 1871 throughout a province of Bengal as large as Ireland, and within sixty miles of Calcutta, even the type of this fever had not been accurately defined, or its conditions systematically examined, up to within the last eighteen months. The gaols of Bengal were vastly improved under

the auspices of Dr. F. Mouat, but his plans were completed before 1859-60, and the health of the prisoners has not improved since he left India. Cholera is as deadly at present among the civil population (and, I believe, among the military also) as it has ever been, and no persistent efforts have as yet been made to mitigate the frightful ravages of this disease among the natives of Bengal.

Yours faithfully,

Grosvenor-street, December 6th, 1875. C. MACNAMARA.

MILITARY MIDWIVES.

To the Editor of THE LANCET.

SIR,—In your impression of the 27th inst. I observe a letter from Staff Surgeon Nelson, R.M.A., upon the propriety of providing well-educated midwives for the army, in order to secure the comfort and well-being of our soldiers' wives and infants during labour, and to render them independent of the ignorant "Gamps" who are always to be found infesting garrison towns.

So far back as 1869 I formed a school for army midwives, in connexion with the training department for civilian midwives, at Sir P. Dun's Hospital, Dublin, to which is attached a large and flourishing midwifery department, I was encouraged and aided in this work by H.R.H. the Field Marshal Commanding in Chief; the then head of the Army Medical Department; my esteemed friend Doctor Dane, the then P.M.O. of Ireland; and also by my Board of Governors.

The school has been for the last five years in a most prosperous condition, and has recently been placed upon a firm basis by the patronage of Her Most Gracious Majesty the Queen. It is in active operation throughout the year. Since its foundation in 1869 up to the present date, I have educated 271 well-informed midwives and ladies' nurse-tenders, and these are now scattered over the empire with their respective corps.

An Army Midwives' Class is now under training.

I have the honour to be, Sir,

Your obedient servant,

EDWARD B. SINCLAIR, A.M., M.D.,
King's Professor of Midwifery, Univ. Dub. Medical School, once Assistant Surgeon to the Royal Scots.

Dublin, Nov. 1875.

ON DILATATION OF THE FEMALE URETHRA.

To the Editor of THE LANCET.

SIR,—Mr. Teale's recent paper on the Treatment of Vesical Irritability in the Female by Dilatation of the Urethra, shows that he and I have unconsciously been working in parallel grooves for some time. I was not aware of Mr. Teale's practice when, in 1871, I adopted a very similar proceeding at the Hospital for Women, Soho-square, to which institution I was then surgeon. Failing to cure cases of painful micturition by other measures, I adopted the plan of rapid dilatation of the urethra with the finger guided by a director, in some cases using a pair of ordinary polypus forceps to commence the dilatation. My idea was that, in some cases, there was a fissure of the mucous membrane analogous to fissure of the anus, but this I was never able to prove, though the rapid dilatation almost invariably produced a tear in the subpubic portion of the mucous membrane, which might, in some cases, be the continuation of a fissure. In a course of lectures on Diseases of the Female Urinary Organs, which I delivered at Soho-square in February, 1873, I narrated many cases illustrating this practice, and from the number of American surgeons who at that time visited the hospital and saw my practice, I imagine that the introduction of the practice into America is due to my example. I can fully confirm Mr. Teale as to the benefit conferred on many cases by the treatment and its failure in others, and I have never seen permanent incontinence result, though my patients have often been unable to retain the urine for twenty-four hours. I have, however, never pushed the dilatation quite to the extent practised by Mr. Teale, having been content to take one finger as my limit.

In another direction, however, I have pushed on somewhat beyond Mr. Teale, and that is in the application of topical treatment to the female bladder. In cases of chronic cystitis, with purulent urine, I have detected, as I believe, an ulcerated condition of the mucous membrane (for with the left forefinger introduced into the bladder it is easy with the other hand to bring the whole of the mucous membrane into contact with it), and I have then applied a strong solution of nitrate of silver by means of a mop, securely fastened on a wire, and passed through a small vulcanite speculum introduced into the urethra. The effect of this has been, in many cases, to render the urine acid and clear in twenty-four hours, and the tolerance of the remedy by the bladder is remarkable. The solution I have employed has been as strong as three drachms to the ounce, and I have never seen any harm follow even where little permanent good was done.

Yours obediently,

CHRISTOPHER HEATH, F.R.C.S.

Cavendish-square, December, 1875.

THORACIC ANEURISM IN ITS RELATION TO SYPHILIS IN THE ARMY.

To the Editor of THE LANCET.

SIR,—I regret having been absent when the interesting subject of Thoracic Aneurism in its relation to Syphilis in the Army was discussed at the Medico-Chirurgical Society. Permit me now to say a few words on a subject in which I feel much interest.

Notwithstanding a somewhat lengthened period of military service, I confess that I should hesitate to attribute the occurrence of aneurism of the aorta to one particular morbific influence. Granting that degeneration of arterial tissue, consequent on syphilis, may tend to induce aneurism, I would, nevertheless, consider that long-continued habits of intemperance—not necessarily periodical, or great excess in drink—is a more frequent origin of the disease.

Space does not here permit me to enter into the question which of these two exciting causes exercises the most pernicious influence on the circulatory system in civil, as well as military life. I feel, however, disposed to think that in cases of disease of the heart and its vessels, both among soldiers and civilians, syphilis does not bear so important a part as alcohol. Very frequently, indeed, the connexion between drink and such diseases has come under my observation, and the same remark applies, in a lesser degree, to acute rheumatism; but, speaking from memory, I cannot recal one autopsy for aneurism in which a marked impairment of constitution, traceable to syphilis, was evidenced. Then, how are we to distinguish between the morbid influences of syphilis and intemperance when, as so very often is the case in the army, they go hand in hand? Difficult, if not impossible.

A third and important exciting cause of this class of disease—pressure from military clothing and appointments—is a well known and acknowledged fact, which needs no comment.

It must borne in mind, that patients affected by aneurism not unfrequently attribute the origin of their complaints to some sudden strain. This circumstance points rather to pre-existing arterial degeneration from one or other of the two first-named causes. The last one—the soldier's dress—I should say, shows its evil consequences more in the generation of hypertrophy and valve disease.

It has, for some time past, been my impression that both aneurism and heart disease are much more frequently met with in the army of late years—that such diseases are on the increase.

Looking back for a period of nearly thirty years, death from aneurism was, in my own experience, infrequent. During an interval of five years which I passed in a line regiment not one occurred, and a considerable interval elapsed after I joined the Guards before the contigency arose. And yet formerly, when long service was the rule a soldier remained much longer under the observation of the medical officer.

If my theory be correct, to what cause may the circumstance be attributed? Was the old coatee and its deplorable adjunct of a military stock less injurious than the tunic? Certainly not. Or were the habits of the men better?

I would rather rest my inference on the ground that ever

since the Crimean war the physique and morale of the recruit have deteriorated; that, consequently—and to a marked extent of late years—the men are incapable of resisting in the same measure the various prejudicial influences to which they are subjected either by military duty or by evil propensities.

I am, Sir, your obedient servant,

FRED. ROBINSON, M.D.,
Scots Fusilier Guards.

Claverton-terrace, St. George's-road, S.W.

THE UTERUS OF HARRIET LANE.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to correct one mistake in your report of the "Note on the Post-mortem Diagnosis of a Nulliparous Uterus" which I read at the last meeting of the Obstetrical Society. The measurement of this uterus at the fundus was not one inch and three-quarters in width, but one inch and a third.

Again: It was not from the special character of this particular uterus that I thought it impossible to form a positive opinion with regard to the existence of a previous pregnancy, but because I hold that to be a general rule. My contention at the late trial was that there was no *proof* of a previous pregnancy; but that, on the contrary, so far as appearances went, the uterus indicated rather the opposite. I am generally credited by the newspapers with having given a positive opinion that this uterus had not borne a child; whereas, the only positive opinion I gave was that no one could tell whether it had or not; but I inclined to the opinion that this had not, and I gave reasons which, in the present state of our knowledge on the subject, I believe are fairly warranted, especially in a doubtful case where issues of life and death are involved.

I am, Sir, your obedient servant,

George-st., Hanover-sq., Dec. 1875. ALFRED MEADOWS.

SANITARY CONDITION OF UPPINGHAM.

To the Editor of THE LANCET.

SIR,—I am desired by the Sanitary Authority of the Uppingham district to forward you the subjoined report of their medical officer and engineer for publication.

Yours faithfully,

WILLIAM H. BROWN,
Uppingham, 8th December, 1875. Clerk to the said Authority.

REPORT

"To the Chairman and Members of the Rural Sanitary Authority of Uppingham.

"GENTLEMEN,—Hearing that the masters of the Uppingham School will probably meet on Friday next, when we presume they will take into consideration the re-opening of the school, we deem it our duty, as the reports we are preparing are not finished, to present an interim statement.

"We find that the condition of several of the schoolhouses is such as to necessitate material alterations in their sanitary arrangements. With a view to facilitate such alterations Mr. Rogers Field, your engineer, has, in accordance with your resolution, placed himself in communication with Mr. Tarbotton, engineer to the schoolmasters, and he has every reason to believe that means are being taken by the school authorities to expedite the necessary works. Until, however, these are completely carried out, so as to enable us to report to you that each individual house in connexion with the school is in a perfect sanitary condition, we think it desirable that you should not in any way countenance a premature return of the scholars.

"We are, gentlemen, your obedient servants,

"ALFRED HAVILAND,
"Medical Officer of Health to the Rural Sanitary Authority of Uppingham;
"ROGERS FIELD,
"Civil Engineer.

"4th December, 1875."

THE WHITECHAPEL MURDER.

To the Editor of THE LANCET.

SIR,—I see by your leading article in reference to the above case that you say "the witnesses relied entirely upon the evidence afforded by the wisdom teeth" to determine the age. In justice to myself I think it right to say that I specially examined the ossification of the several parts of the sternum, as well as the *dentes sapientiæ*, in order to assist me in arriving at the probable age, which I gave as *about* twenty-five years.

Again you say—"It is certainly surprising that neither side made any attempt to demonstrate the presence or absence of *linea albicantes* upon the abdomen." This, too, is a mistake; and I am quite sure you will be amused by the observation from the Lord Chief Justice in reference to my evidence on this point, that he did "not see what that had to do with it!" It is not my fault that other very important evidence was not given, which would go very far to establish, beyond any reasonable doubt, the fact of pregnancy. I tried to confine my observations closely to the exact questions put to me. Suffice it to say, that I had taken care to give my reasons fully in my reports to the prosecution, and in reply to my observation thereon, Sir John Holker said, "there was ample evidence," or something to that effect—as proved by the result of the trial. I have been requested by several persons to report my evidence as to pregnancy *in extenso*, which I will do. I believe my colleague in this case, Mr. Bond, has promised to send you a report.

Yours truly,

F. G. LARKIN.

Trinity-square, Southwark, S.E., December, 4th, 1875.

BIRMINGHAM.

(*From our own Correspondent.*)

THE scheme propounded for the sanitary improvement of the town by the adoption of the Labourers and Artisans' Dwellings Act, to which attention was called in a previous article, is about to be increased in magnitude and importance. At their last meeting, the Town Council decided, on the recommendation of Dr. Hill, the medical officer of health, to deal with a large district contiguous to that already scheduled, and comprising not less than fifty acres of land. Narrow streets, close courts, houses built back to back, insufficient space, dilapidation, and bad drainage, combine to make this part of the town very unhealthy. While the average death-rate of the borough last year was 26·78, the death-rate in some of the streets in the proscribed area was 54, and in one street reached the frightfully high ratio of 73 per 1000. The proposal to extend the scheme originally suggested will involve a great outlay, but I believe that in the long run it will prove, as at Glasgow, to be a financial success, while the benefits it will confer on the town as a sanitary reform are simply incalculable. Dirt, drunkenness, disease, and death are costly companions, and they will not be banished from the town until the working classes have healthy homes, better education, and more rational sources of enjoyment and pleasure than the public-house and the liquor vault now afford them. Schools established under the Education Act are already raising the intellectual standard of the rising generation, but these will fail in their aim if the children are brought up in dirty houses and in squalid streets and alleys, and have not their physical condition also considered in the establishment of more numerous and extensive play and recreation grounds, at which the sports and pastimes that encourage the growth of healthy muscle and bone can be indulged in.

The Committee of the Midland Medical Institute have arranged with the authorities of Queen's College to occupy some of their rooms at a rental of £200 a year. It is far better that the medical reference library should be located here than at any place at a distance from the medical school. Students as well as teachers will alike benefit by the proposed arrangement.

The periodical collections for the Queen's Hospital in the various churches and chapels of Birmingham have this year realised over £5700, a larger sum than has ever before been collected on Hospital Sunday, and a sufficient answer to those who urged that the adoption of the "free system" would diminish the number of friends and supporters of the charity.

The late Mr. George Allarton, whose obituary you gave last week, was much respected in this town by many of the

older members of the profession who knew him during the time he practised at West Bromwich, and who adopted and still perform his modification of the median operation of lithotomy.

Francis Warner, M.D. Lond., having been recently elected assistant-physician to the Children's Hospital, after a contest with another graduate of the University of London, a gentleman congratulated the governors of the hospital on the fact of their having two such excellent candidates, and remarked that theirs was the only hospital in the kingdom whose medical staff were graduates of London, a distinction which he hoped would be maintained.

You have already called attention to the success which attended Dr. Richardson's inaugural address at the Midland Medical Society, and to the presentation of a testimonial to the worthy treasurer, Mr. James Harmar. In future that Society will exist only for "the promotion of scientific and practical medicine and surgery by the delivery of addresses, the reading and discussion of papers, and by pathological and other demonstrations." The books and periodicals are handed over to the Midland Medical Library, and the reading-room will be transferred to Queen's College.

Nov. 15th, 1875.

GLASGOW.

(From our own Correspondent.)

THE first annual meeting of the Western Infirmary of Glasgow was held on the 25th ult., and the report presented by the secretary was, on the whole, satisfactory. The ordinary income had fallen short of the ordinary expenditure by £1399, but the deficit was covered by the result of a special appeal to the public in May last, when a reserve fund was obtained of £3736. With regard to the financial future some of the speakers took a rather doleful tone, and indicated that unless there was increased liberality it might be expedient to curtail rather than augment the accommodation. Others, and with justice, looked forward hopefully, and trusted that as the needs and benefits of the institution became more widely known, there would be no necessity for any special subscription fund. In the interest of medical education we trust the hospital will be still further extended. There are now, we understand, upwards of 200 medical students attached to the University, and when the session commenced there were only 141 patients in the hospital. It is obvious that this is far too small a number for the purposes of clinical teaching.

The annual dinner of the Faculty of Physicians and Surgeons was held on the 26th ult. in the Faculty Hall, under the genial presidency of Dr. Fergus. "Floreat res medica," the toast of the evening, which a well-known judicial authority has translated, "Let disease continue and doctors flourish," was given from the chair, and responded to with hearty enthusiasm. In replying to the toast of the "House of Commons," Dr. Cameron, the Liberal, and Mr. Whitelaw, the Conservative member for Glasgow, both referred to the importance of having more medical men sitting in the legislative assemblies, and Dr. Cameron observed that while other professions were honoured by a seat in the House of Peers, it was an anomalous fact that there was no medical representative there. A justly esteemed medical man shook his head and negatived the idea. Dr. Cameron, observing this, humorously stated that perhaps the objector would be contented with a Baronetcy, but that he still maintained that a medical peer was a necessity, and might yet become a Radical grievance. Perhaps the most important statement of the evening was made by Dr. Geo. Buchanan, who, in replying for the University of Glasgow, declared that, consistent with the ordinances, every extra-mural lecturer would be recognised by the University Court. This announcement, which was doubtless made on authority, was hailed with satisfaction. There can be little fear of a hospital languishing for public support, connected as it now is with a university which has cast off ancient traditions and, in inaugurating such a liberal programme, has become in unison with the spirit of the age. The faculty is in a very flourishing condition; the number of junior fellows who have entered during the last two years evinces a considerable increase as compared with the past. The scale of fees as sanctioned by the faculty ought to be altered. Glasgow boasts of being the second city of the empire, but its merchants have no hesitation in paying medical men at half-a-crown a visit. Such a sum might have been sufficient when the Clyde could be crossed on stepping-stones where the Atlantic liners now anchor, but it is absurdly small for the wealth and present position of Glasgow. It is certain that a strong and united effort on the part of the faculty would place things on a better footing, and make this town a field for professional success second to none in Great Britain.

A few days ago an article appeared in one of our daily papers, inspired either by a candid friend or secret foe, and revealing a sad state of matters in the class of Physiology in the University. It appears evident, from the correspondence which has ensued on the subject, that years are telling on, and voice is failing, the present occupant of the chair, Dr. Andrew Buchanan, for it is stated that only the students on the first or second bench can detect the subject of the veteran lecturer's discourse. While this fact has been broadly mooted, and not contradicted, yet all the students, both past and present, who have taken part in the correspondence, speak with the greatest respect of one who has undoubtedly done much good work in his day. It is evident that a crisis has occurred, and that a change is imminent in the teaching of physiology; and, looking at the matter impartially, it is to be hoped that Dr. Buchanan will imitate his friend and former colleague, Dr. Rainy, and retire from a field in which he has worthily won his spurs. The discussion shows very clearly and pertinently the necessity for the recognition of extra-mural lecturers and for free trade in teaching.

Glasgow, Dec. 6th, 1875.

P.S.—Professor Andrew Buchanan has intimated to the University Court his resignation of the Chair held by him.

IRELAND.

(From our own Correspondent.)

THE first meeting of the Medical Society of the College of Physicians, Ireland, took place on Wednesday, Nov. 10th. The President, Dr. Samuel Gordon, in his inaugural address, mentioned with approval the epidemiological reports which of late have formed a part of the proceedings of each session. He instanced the success of the efforts which have been often adopted of late, in arresting the spread of so serious and infectious a malady as scarlatina, and paid a just tribute to the value of preventive medicine in this as well as in so many other diseases. The death of three members of the medical profession at Dublin lately, formed the theme of much of the President's address. Mr. Lestrange was better known in the surgical world by his invention of some important surgical instruments. Professor Law's valuable communications and his carefully recorded cases were of great importance, and led to subsequent valuable discoveries, more especially in reference to cirrhosis of the liver and gangrene of the lungs. Mr. John Hamilton, although not a member of the Society, took an interest in every society for the promotion of medical progress. His illness originated in an attack of dysentery some five years ago; although he appeared quite to have recovered from this attack, a subsequent relapse entailed much suffering, and from this time he was never quite free from obstinate constipation for any length of time; more recently he had an attack of choleraic diarrhœa. Evidence of mischief was afforded by the occurrence of a fissure, tumours, and abscesses, and lastly a communication was formed between the rectum and bladder. The terrible suffering that now arose rendered an operation desirable. Colotomy rendered life more endurable during the few remaining days of Mr. Hamilton's life; and he died, to use the words of Dr. Gordon, a model of faith, resignation, and patience.

Sir Dominic Corrigan, Bart., read his observations on Aix-les-Bains. He commended their efficacy, and while he pointed out some minor matters which he thought might be improved, he spoke generally in very high terms of the arrangements for the benefit of invalids. Dr. A. W. Foot also read an interesting paper on a remarkable case of obesity treated with liquor potassæ and extract of fucus vesiculosus.

The Obstetrical Society held its first meeting for the session on 20th November. The President, Dr. Atthill, spoke at

length on some of the theories that have been brought under notice in connexion with the monthly uterine flow.

The very important question, "What is Dublin to do with the Liffey?" is now under the earnest consideration of many who wish well to Ireland's chief town.

An injunction has been obtained by the Citizens' Committee against the expenditure of any more money by the Dublin Corporation on the protracted action by that body in reference to the main drainage question.

Sir John Glover continues to improve daily. He is now able to be up, and we have every reason to trust that his recovery may now steadily progress. He is still under the able care of Mr. Butcher.

A skating rink on the most improved plan is approaching completion near the Exhibition Palace Grounds, Earlsfort-terrace, Dublin.

The extraordinary damp and cold of the present season is tending to spread different forms of zymotic disease now prevalent in Dublin. Of these we may mention—fever (typhus and typhoid), measles, scarlatina, and erysipelas.

Pulmonary affections, and cases of severe attacks of diarrhœa with a tendency to dysentery, demand real activity on the part of the sanitary authorities and the people themselves, especially as the condition of the lodgings of the working and poor classes at Dublin are in so bad a condition in many parts of the old city.

The custom of "waking," even those dead of contagious diseases, continues unchecked by the authorities.

The Dublin barracks have lately had a somewhat unhealthy reputation; it is but justice that this matter should be more fully inquired into. Dublin itself has need of improvement in the same direction, and steps have already been commenced with that intention. Indeed, from a combination of causes, notably, as it would appear, from the severe and wet character of the last few months, many of the old houses in the more ancient parts of Dublin have given evidence of great danger to their inmates from indications of actual falling; and to tell the truth, at least five or six houses quite lately have thus come to grief, happily with but little loss of life. Enough of mischief has, however, happened in this way to stir the civic authorities to active measures, so far as their powers extend. Several streets and lanes in the older parts of Dublin now present numerous hoardings and many buildings in progress of demolition. Such measures, provided sufficient new buildings be provided for those who may be deprived of homes by the removal of the old houses, cannot but exert a highly beneficial influence on the health of the Irish metropolis, including the troops quartered therein.

The necessity for improved huts on the Curragh is finding expression in the daily journals at Dublin. The *Irish Times* forcibly draws attention to the matter, pointing out that the good of the public service loudly demands attention to that question.

A monument to Grattan has just been erected at College Green; it awaits unveiling.

I have just availed myself of an opportunity of visiting the Richmond barracks, which stand on a somewhat elevated plateau, some three miles south-west of the General Post Office. On the south the barrack grounds are bounded by the grand canal, on the west by a valley of some depth through which flows a stream providing natural drainage on that side, and at some distance also on the north of the barracks, as it flows eastwards on that side. The ground slopes by a gradual descent from the site of the barracks towards the east. The buildings are apparently about fifty years old, and surrounded by a large parade ground, enclosed by strong walls. The accommodation is considered good, and provides for a force of about 1000 men. During the present season, as well as in the last summer and autumn, but two cases of enteric fever have occurred in this barrack, and in both cases recovery took place. An outcry has been raised against the water supply, which is derived from the canal, and some have called for a supply of the Vartry water, with which Dublin is supplied. There is no doubt that a certain amount of organic impurity is to be found in the canal water, especially in the summer and autumn months. On the other hand, however, there are those who argue that the lime salts which are present in the canal water under consideration are eminently useful and even necessary for the proper nourishment and growth of the human race, as well as for other animals. In this respect the Vartry water is almost absolutely pure. There are many sanitarians who incline to the belief that a certain amount of hardness is beneficial in water as an article of diet, although it may be admitted that it is a quality which is objectionable in other ways, as in cooking, washing, &c. Whether the source of water supply be taken from the canal as at present, or from the Vartry, it is advisable, in the interests of civilians and the military alike, that very strict attention be paid to the prevention of access of organic matter to each source of supply.

At the meeting of the Dublin Pathological Society (Dec. 4th), the President of the College of Surgeons exhibited a case of chronic rheumatic arthritis. Mr. Hamilton also exhibited a case of extra-capsular fracture of the femur, with impaction and transverse fracture immediately below. Dr. Grimshaw brought forward a case of colloid cancer of the great omentum. Mr. Wilson exhibited an eyeball removed from a man 77 years of age. It was a dark black mass, without any organisation whatever. On microscopic examination, it was seen to be an instance of ordinary pigmented spindle-celled sarcoma. Dr. Atthill exhibited an example of imperfect development of the rectum in a fœtus. Dr. Robert McDonnell made a communication on securing bloodvessels by torsion.

The extreme severity of the weather has produced a considerable increase of sickness in Dublin as elsewhere. Pulmonary affections—a form of catarrhal febrile attack, accompanied with a good deal of prostration—has become common; whilst the existence of some cases of severe typhus, some of typhoid fever, as well as of cases of scarlatina and measles, warns us to be up and doing in sanitary improvements.

The Sanitary Association here is again drawing public attention to the noxious influence exerted by the depôts of fetid organic matter which exist so numerously in Dublin. The Dublin Main Drainage Question still hangs fire, and it is to be hoped that the most approved system will be carried out, and that all persons concerned will use their best endeavours to bring about a system which, while it must be suited to the already heavily-taxed resources of the citizens, may fulfil the requirements of the population.

PARIS.

(*From our own Correspondent.*)

OPENING OF THE SCHOOL OF MEDICINE AND THE PARIS CLINIQUES.

In my last letter I spoke of the forthcoming opening of the winter session of the Faculty, and gave you a programme of the lectures which the professors and the various hospital physicians and surgeons were preparing to give. On the 3rd inst. the School of Medicine threw open its doors, and the same day Professor Gavarret lectured on Heat, M. Duguet on the Diseases of the Urino-genital Organs (opening lecture), Professor Sappey on Anatomy, and Professor Chauffard on the Comparative Character of Acute and Chronic Disease.

The clinical teachers in the hospital have likewise been busy at work the whole of last week. The three professors at La Charité inaugurated their teaching, and in doing so they all seemed impressed with the necessity of giving an additional impetus to the clinical teaching of the Faculty in view of the rival schools, and especially the Catholic ones, which are about to be established on the strength of the new laws on freedom of teaching. All three of them expressed themselves very energetically on the subject. Professor Séa declared that the necessity of studying seriously was greater now than ever. The rival Faculties were still in a state of embryo, but it was necessary to begin work at once. The standard of clinical teaching should be raised higher than ever. "On this ground," exclaimed the Professor, "we can bid defiance to our adversaries; and, as to myself, I feel the younger for the conditions which the laws on freedom of teaching have imposed."

M. Trélat expressed the same views on the question, and especially insisted on the following train of thought: "In view of the rival schools which are about to be established, the time is come when all of us, masters and pupils, must rally around a common flag—that which we owe respect to, and faith in, scientific truth. What man has gained by science it is our duty to maintain, and this appropriation of knowledge constitutes a patrimony which we must respect and defend. To have faith in the progress of science, to adhere to the truths which it teaches, is our honour and

our dignity. By tightening, through our labour, the bond which unites us we shall follow the way traced out by illustrious predecessors, and we shall not be unequal to the task we have before us."

The foundation of new faculties, and especially the rival teaching of the Catholic party, are much talked about by the medical body, and form the subject of every conversation. There is no doubt that much anxiety is entertained as to the results of these most radical changes. At the same time, there is no doubt that the spirit of competition is working good effects, and has produced throughout the whole body of teachers in the school or the hospital an earnestness and a zeal for labour and success which must be highly useful.

Before leaving the *cliniques* of La Charité, I may just add that, in addition to their general remarks, M. Trélat gave a very substantial lecture on the Diagnosis of Tumours of the Breast, whilst Prof. Sée judiciously insisted on the necessity of giving more importance to the therapeutics of clinical teaching, and stated his intention to devote two of his lectures, out of three a week, to the therapeutics of cases, and only the third to comparative diagnosis. His first lecture was on the Action of Drugs in General. As to Prof. Gosselin, the third lecturer at La Charité, he resumed his admirable lectures by a comparative description of several cases under treatment.

At the Hôpital des Enfants, Dr. Simon opened his lectures by a study of Infantile Paralysis, and at Cochin Dr. Bucquoy commenced with a lecture on Uræmia, in connexion with a case under observation.

No decision has yet been taken as to the nomination of the Dean, the two Assessors, and the two new Professors of the School, in place of Professor Bouillaud, who has retired, and the regretted Lorain, whose death I mentioned in my last letter. Maurice Raynaud, the learned author of "Molière and his Times," will very likely be nominated to the chair of History of Medicine, whilst Potain, the celebrated "clinician" of Necker Hospital, is almost certain to get the chair of Pathology.

The pulling down of the building which the "Assistance Publique" made use of as a central bureau for all the Paris hospitals will very probably give rise to an important change connected with the distribution of patients amongst the hospitals. Every hospital here can daily admit a certain number of patients presenting themselves directly to the house-surgeon on duty, but, on the other hand, a fixed number of beds is reserved for the Central Bureau, where patients present themselves, and whence they are distributed over the various hospitals, which, as you know, are all under one and the same administration. This entailed a great loss of time and great difficulties on patients, who were obliged to go from all the various and most distant quarters of Paris to the Central Bureau near Notre Dame, there to get tickets of admittance and afterwards to proceed to their respective hospitals, some of which are situate at great distances. In order to reform this, the Prefect of the Seine has suggested a plan by which there would be a small bureau of admittance in every *arrondissement* of Paris, connected with a central office by means of the telegraph. Each bureau would serve for its special quarter of the city. There is no doubt that this would be a great improvement on the present order of things. The authorities at the Assistance Publique hesitate, however, on account of the great increase in the number of medical officers which the reform would involve.

Amongst the recent measures brought for approval before the National Assembly, is one for the pulling down of the Ecole Pratique and the Hôpital des Cliniques, situate opposite the School of Medicine. The Ecole Pratique has become much too small and encumbered for the present requirements of the School of Medicine, and constitutes, besides, a cause of much complaint in that quarter of the town, as it contains the dissecting-rooms of the Faculty.

DEATH OF GIRALDÈS.

It is with great grief that I have to mention the death of the most learned of contemporary French surgeons, my respected master and friend, Dr. Giraldès. On Saturday morning I received a note which had been written on the evening before by Dr. Hahn, the librarian of the School of Medicine, and in which, knowing the friendship that existed between Dr. Giraldès and myself, he had hastened to inform me of the melancholy circumstances which had attended the death of Dr. Giraldès. At about seven the same evening, Dr. Giraldès had called at the library of the Faculty, when suddenly he felt ill, and began spitting blood. Dr. Hahn put him in a cab, and was accompanying him home, when about half way from the school to his house, Dr. Giraldès died in the arms of Dr. Hahn without any apparent suffering.

I enter into all these particulars because I know how many friends Dr. Giraldès reckoned in England. He was personally known, and most highly liked and esteemed, by Sir James Paget, Prescott Hewett, Holmes, Jonathan Hutchinson, Birkett, Critchett, Bowman, and many others, who, I know, will regret his loss very severely.

Dr. Giraldès was most remarkable for his erudition, which was one of the ornaments of modern French surgery. He was deeply versed in the surgical literature of every country, but most especially that of England. The most minute details of the history or modes of operations, the slightest anecdotal particulars relating to the advance of surgery in Great Britain, or to those who promoted its progress, were familiar to him. In all the academies or societies of which he was a member he rendered invaluable services by his complete and extensive knowledge of foreign surgery, and he invariably formed part of every committee appointed to investigate questions having a foreign connexion.

His erudition was not a matter of mere memory; it was a complete and careful storing up of facts, synthetised, compared together, sifted, and examined by a mind of remarkable keenness, and with solid judgment. These latter qualities were most conspicuous in his intellectual disposition. He had a quiet, sarcastic manner of disposing of so-called discoveries, a power of common sense and judgment which, added to his wonderful knowledge of facts, made him one of the most valued members of professional bodies.

He was a hard worker in the field of surgical science—actively engaged from early morn to evening, either in his wards in the hospitals or in his study, or in his practice in town, in the search for something to elucidate a problem or simplify a proceeding, something to do justice to whom it was due, or to alleviate the sufferings of humanity.

He had identified his name with the surgical wards of the Hôpital des Enfants Malades, where for several years he practised the surgery of children, and delivered most interesting and remarkable lectures on the subject. His lectures have been gathered and edited by one of his talented house-surgeons, Dr. Bourneville, and they form a most valuable book—a lasting production of the eminent man from whom it came, and a volume to be possessed by all who care to know the surgery of children.

I cannot in these hurried lines allude to all Dr. Giraldès' other titles to scientific eminence, to the esteem of his contemporaries, and the recollection of posterity.

As to his eminent qualities of mind and character, his independent and liberal spirit, his love of justice, his unbounded devotedness to his friends and pupils, I, who lived in his intimacy and was attached to his wards, can testify with the strongest feelings of personal gratitude and admiration, and I am confident that all who enjoyed his friendship will share this feeling.

Paris, Nov. 30th, 1675.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Dec. 2nd:—

Broome, Stephen Bernard, Camden-street.
Elcum, Donald, Warwick House, Cheltenham.
Houchin, Edmund King, High street, Stepney.
Whitfield, William Clarke, St. Owen-street, Hereford.

The following gentlemen passed the Primary Professional Examination on the same day:—

Henry Frederick Bailey and John Gairdner, University College; William Henry Rean, London Hospital.

The Town Council of Londonderry last week re-elected Dr. William Miller to the office of Mayor.

AT a meeting of the Municipal Council of the City of Dublin, held last week, Dr. George B. Owens, J.P., was unanimously elected Lord Mayor of Dublin for 1876.

A MAN named Savage died in Kerry last week after completing his one hundred and sixteenth year. He was born in 1759, and three years ago voted at an election at Listowel.

DUBLIN PATHOLOGICAL SOCIETY.—The subject for competition this session is "On Bursitis, and its Pathology," and the author of the best essay sent in by students who attend the meetings of the Society is presented with a gold medal, value £5.

ROYAL MEDICAL SOCIETY, EDINBURGH.—The following is the list of office-bearers of this Society for the session 1875-76:—Presidents: Dr. A. R. Turnbull, Dr. A. R. Coldstream, Dr. Thos. R. Ronaldson, and Dr. Thos. D. Wilson. Hon. Secretaries: Mr. George Ogilvie, and Mr. Leslie Ogilvie. Curator of Library: Dr. J. J. Cox. Curator of Museum: Dr. J. Graham Brown. Hon. Treasurer: Mr. J. R. Young. Sub-Librarian: Mr. John Turner.

WATER-SUPPLY.—At a meeting of the council of the Metropolitan Poor-rate League held last week, the form of a memorial to the Home Secretary on the water-supply question was agreed upon. The memorialists ask that the supply shall be placed in the hands of a governing body elected by the ratepayers; that immediate action be taken to prevent any increase of charge being made upon the anticipated increased assessments; and that the term "annual value" in the Companies Acts be defined to mean the "rateable value" and not the gross "annual value." It was also determined that the subject of local taxation generally should be brought under the notice of the government and the ratepayers.

THE LONDON SICK POOR.—At the regular meeting of the Metropolitan Asylums Board in Spring-gardens, on Saturday, Dr. Brewer presiding, it was shown that fever was somewhat diminishing among the pauper class, and that from small-pox the same class is wholly free, not one case being in hospital. At the Homerton asylums for fever there were 199 cases, as against 208 the previous fortnight. Of those remaining 139 were of scarlet fever, 39 of enteric, 11 of typhus, and 107 of other diseases. At Stockwell asylum there were on Saturday 114 cases of scarlet fever, as against 116 a fortnight ago, 27 cases of enteric fever, 1 of typhus, and 2 of other diseases, making in all 144. It was reported to the managers that the Commissioners in Lunacy had inspected the temporary imbecile asylum for children at Clapton and the imbecile asylum at Hampstead for adults, and the reports read expressed satisfaction with the general condition of the patients. Plans were laid before the Board for erecting administrative offices on the sites for asylums at Hatcham, Fulham, and Hampstead, and the cost in each case, it was stated, would not exceed £10,000. It was agreed that the plans should be presented to the Local Government Board.

Medical Appointments.

ALLEN, R. G., M.R.C.S.E., has been appointed Resident Physician to the Queen's Hospital, Birmingham.

BIGGER, S. F., M.R.C.S.E., has been appointed a House-Physician to the Royal Infirmary, Liverpool.

BRANFOOT, H. S., M.B., M.R.C.S.E., has been appointed House-Physician to the Radcliffe Infirmary, Oxford, vice Rayne, appointed Assistant-Physician to the Manchester General Hospital and Dispensary for Sick Children.

CUNNINGHAM, C. L., L.R.C.S.Ed., L.M., has been appointed Medical Officer to Bradshaw's Charity, Ore, Hastings, vice Cumming, resigned.

DOBBIE, R. J. A., M.R.C.S.E., has been appointed Resident Medical Officer to the Dover Hospital and Dispensary, vice Pasley, who has received a Colonial appointment in the Island of Trinidad.

EDWARDS, F. S., M.R.C.S.E., has been appointed a House-Surgeon to St. Bartholomew's Hospital.

EMMS, A. W., M.R.C.S.E., has been appointed a Medical Officer to the Leicester Provident Dispensary, to reside in the village of Belgrave.

EVANS, D. T., M.R.C.S.E., has been appointed House-Surgeon to the Denbighshire Infirmary, Denbigh, vice Lloyd, resigned.

FARRAR, C., M.D., L.F.P. & S. Glas., L.M., has been appointed Medical Officer of Health for the Chatteris Urban Sanitary District, vice Wilson, appointed to the Rochdale Urban Sanitary District.

FOWLER, T., L.K.Q.C.P.I., L.M., L.R.C.S.I., has been appointed Medical Officer for the Thoydon-Garnon District of the Epping Union, Essex.

GREENFIELD, W. S., M.D., M.R.C.P.L., has been appointed a Physician to the Royal Infirmary for Children and Women, Waterloo-bridge-road, vice Sparks, resigned.

HORSLEY, J., F.C.S., has been appointed Public Analyst for Merthyr: 10s. 6d. per analysis; and 21s. per day, second-class travelling expenses, and hotel charges, when required to give evidence.

HOUGH, J., M.R.C.S.E., has been appointed Medical Officer to the Borough Gaol, Cambridge, vice Hammond, deceased.

JOHNSTON, W., M.D., C.M., has been appointed a Medical Officer to the Leicester Provident Dispensary, vice Wilby, deceased.

JOYNES, F. J., M.R.C.S.E., has been appointed Medical Officer to the West Gloucester Friendly Society, Dursley, vice D'Oyle, deceased.

KITE, J. A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the whole of the Welwyn Union and the Workhouse, vice King, resigned.

M'LACHLAN, S. F., M.B., C.M., has been appointed House-Surgeon to the Chorlton-upon-Medlock, Rusholme, and Moss-side Dispensary, Manchester, vice Daly, resigned.

M'MASTER, R. D., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed a House-Physician to the Royal Infirmary, Liverpool.

MALCOMSON, J. A., M.D., C.M., L.M., has been appointed Medical Officer of Health for the Middlesborough Rural Sanitary District: £100 per annum.

MEEHAN, N. J., M.D., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Oulart Dispensary District of the Enniscorthy Union, Co. Wexford, vice M'Swiny, resigned.

OWEN, W., M.R.C.S.E., has been appointed Medical Officer for No. 6 District of the Parish of St. Matthew, Bethnal-green, vice Sarvis, deceased.

SHAW, W. F. [not "J. M.," as stated on p. 823], has been appointed a House-Surgeon to the Royal Infirmary, Liverpool.

SHUTER, J., M.A., LL.B., M.B., M.R.C.S.E., has been appointed Assistant Demonstrator of Physiology at St. Bartholomew's Hospital.

SMITH, J. B., M.A., M.B., has been appointed Resident Surgeon to the Queen's Hospital, Birmingham.

SMITH, W. A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Clogher Dispensary District of the Clogher Union, Co. Tyrone, vice Scraggs, resigned.

STERLING, R., L.R.C.P.Ed., L.R.C.S.I., L.M., has been appointed Medical Officer and Public Vaccinator for the Eastern District of the Christchurch Union, vice Brash, resigned.

SUTHERLAND, W., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer for the Rothley District of the Rothbury Union, Northumberland, vice Brodie, resigned.

THOMSON, W., M.D., has been appointed Medical Examiner to the Customs for Ireland, vice Hamilton, deceased.

WALSH, T. B., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ballyclough Dispensary District of the Mallow Union, Co. Cork, and Medical Attendant to the Royal Irish Constabulary, Ballyclough, vice Harrison, appointed Medical Officer for the Dunerailе Dispensary District of the Mallow Union.

WILSON, J. H., M.B., C.M., has been appointed Assistant-Surgeon to the Leith Hospital, vice Veteh, resigned.

WILSON, T. D., M.A., has been appointed House-Surgeon to the Leith Hospital, vice Daniel, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BULLOCK.—On the 30th ult., at Isleworth, the wife of Henry Bullock, F.R.C.S.E., of a daughter.

CHARTERIS.—On the 5th inst., at Blythswood-square, Glasgow, the wife of Matthew Charteris, M.D., of a son.

HURD-WOOD.—On the 2nd inst., at Great Bardfield, Essex, the wife of J. Hurd-Wood, M.D., of a daughter.

LYDALL.—On the 2nd inst., at Mecklenburgh-square, the wife of Wykeham H. Lydall, L.R.C.P.Ed., of a daughter.

MACKESY.—On the 6th inst., at Waterford, the wife of G. I. Mackesy, M.B., of a daughter.

WATERWORTH.—On the 2nd inst., the wife of T. H. Waterworth, M.D., of the New Kent-road, of a daughter.

WILBE.—On the 30th ult., at York Lodge, Finchley-road, the wife of Richard Haydock Wilbe, M.D., of a son.

MARRIAGES.

HUGHES—DIXON.—On the 20th ult., at St. Mary's, Andover, Wm. P. Hughes, M.D., to Fanny Jane, widow of H. M. Dixon, M.D.

WILSON—COWAN.—On the 7th inst., at Mount-street, Aberdeen, John S. Wilson, M.R.C.S.E., L.R.C.P.Ed., F.R.G.S., of Greenock, to Isabella Henderson, daughter of Wm. Cowan, Esq., Locomotive Superintendent, Great North of Scotland Railway.

WOOD—WHITE.—On the 29th ult., at St. John's, Paddington, Henry Thorold Wood, M.R.C.S.E., to Alice, daughter of T. White, Esq.

DEATHS.

BARRETT.—On the 1st inst., at Kilcullen, Co. Kildare, James M. Barrett, L.K.Q.C.P.I.

BUCHANAN.—On the 29th ult., at Gloucester, T. Cox Buchanan, F.R.C.S.E., aged 71.

DONOVAN.—On the 3rd inst., at Haddington-road, Dublin, James Donovan, M.B., retired Surgeon R.N., aged 74.

HALL.—On the 6th inst., at The Limes, Swadlincote, Christopher Hall, M.D.

MARTIN.—On the 3rd inst., at Pendlebury, Manchester, Thos. Martin, M.D., aged 37.

REARDON.—On the 25th ult., at Donerailе, Co. Cork, Robt. Reardon, M.D., aged 75.

THORNE.—On the 30th ult., at La Motte, St. Heliers, Jersey, James Thorne, M.R.C.S.E., L.R.C.P.Ed., in his 31st year.

TOTHILL.—On the 2nd inst., at Westbury, Gloucestershire, Wm. Tothill, Surgeon, aged 91.

WEBSTER.—On the 1st inst., at York-parade, Northampton, J. H. Webster, M.D., aged 60.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

THE LANCET COMMISSION ON LUNATIC ASYLUMS.

THE Report of THE LANCET Sanitary Commission on Hanwell Lunatic Asylum will appear next week.

EMBOLISM OF FAT AFTER FRACTURE OF BONES.

OBSTRUCTION of lung capillaries by fat has been found at post-mortem examinations, though injection of pure oil into the veins of animals cannot, as it appears from experiments of F. Busch and Bergmann in Dorpat, set up inflammatory action and formation of abscess. Busch, however, succeeded in some experiments conducted in Recklinghausen's Pathological Institute, in causing embolism and sudden death by rough handling of broken bones, and in proving that from the fractured spot particles of bone-marrow had been sucked into the torn veins, and carried on into the vessels of the lungs. Dr. Czeray, Professor of Clinical Surgery in the University of Freiburg, gives in the *Berl. Klin. Wochenschr.*, No. 44, the history of a case in which a healthy, robust mason, aged thirty-two, had his right thigh-bone broken, and died thirty-eight hours after this uncomplicated fracture with symptoms of acute obstructions in the lungs and brain. The autopsy showed a large extravasation of blood around the fractured bone-ends, in which great quantities of coagulated fat-drops could be seen floating. The broken surfaces appeared jagged on a fine splinter still connected with the periosteum. The smaller arteries and capillaries of the lungs appeared under the microscope distended with clear liquid fat throughout all parts of both organs, the right one being perhaps more filled with fat than the left. Boiling in ether drew the fat off. The endothels of the lung-cells of such pieces appeared richer in protoplasm, and their nuclei more distinct than in the normal state. In the smaller branches of the pulmonary artery quantities of coagula were found, which showed, microscopically, distinct fat-drops mixed with water. The same could be detected in the blood drawn from the femoral vein by means of a pipette. The brain showed on sectional surfaces numerous blood-spots in the cortical substance, some small, and at some places sufficiently numerous hæmorrhagic ecchymoses; the vessels leading to them were found under the microscope filled with branching emboli of fat. In the kidneys the vessels of the glomeruli were filled with fat. In the liver, numerous small drops in the intra-lobular vessels could be seen, but no branching thrombus. No embolism was detected in the muscle of the heart. The filling of the lung vessels was of such extent that the obstruction of circulation, œdema, and carbonic-acid poisoning caused by it fully accounted for the sudden death, which might have been accelerated, as Dr. Czeray seems to infer, by the embolism of the brain. He thinks that cases of so-called traumatic delirium or reputed commotio cerebri may be caused by fat embolism after fractures. The pressure of the arterial blood flowing from lacerated vessels and the contractions of muscles may force the fat particles into the opened veins. Dr. Czeray contends, however, that a certain amount of fat embolism occurs with every fracture, and is easily overcome. As the melting point of human fat is as low as from 15° to 25° C., a febrile rise of the temperature of the body cannot cause any remelting of coagulated extravasations of marrow. Experiments on dogs to emulsionate injected fat by an after injection of a weak solution (two per cent.) of carbonate of soda always resulted in the death of the animals.

Mr. W. Stirling Anderson.—It shall be published very soon.

THE SCHOOL BOARD AND THE DARWINIAN THEORY.

To the Editor of THE LANCET.

SIR,—It would appear that the School Board for London, or at least a majority of that body, are believers in the theory that "the fittest survive," to judge from the way in which the children under their rule are, in spite of the present inclement weather, daily turned out from the hot school-rooms into the open air.

A mother, whose name I give in confidence, as she dreads being embroiled with the Board, quite recently sent her children to school, and, as they had some distance to go, gave them their dinner to take with them. On their return home in the evening, she asked them where they had eaten it, and they said in the playground. They would not be allowed to remain in the school-room during the dinner hour. As a natural consequence, these children have caught severe colds.

The same person also informed me that on two different occasions her little boy had required "to leave the room," but had been refused permission by the teacher. As can be imagined, the result was unpleasant.

Surely School Board teachers are not so obtuse as not to be able to discriminate between a child who really requires, and one who pretends to want, to go outside; or, if so, the sooner the poor little ones are confided to the care of others not so insensible to the wants of juvenile humanity the better.

Your obedient servant,

Old Kent-road, Dec. 7th, 1875. W. F. GREENE, M.B., M.A., &c.

Mr. C. Chester.—The best work on Impediment of Speech is, we believe, by Hunt, and published by Longmans. Mr. John Bishop has written on "Articulate Sounds, and on the Cause and Cure of Impediments of Speech," published by Churchill.

INJUSTICE TO MEDICAL WITNESSES IN POLICE COURTS.

WE lately published a case in which a medical witness received very inadequate remuneration in a Police Court. Mr. J. T. Williams, Barrow-in-Furness, complains to us of a still greater injustice. He, on request, attended the magistrate's court, and was kept waiting an hour and a half, and, because the case was dealt with summarily, was told that there was no fund out of which he could be paid a fee. He applied to the Home Office, and received that ample-margined letter, or rather two, to the effect that Mr. Secretary Cross was unable to order any fee to be paid. Strange injustice goes on under the forms of law. Our correspondent should decline to attend in future without being subpœnaed.

A. K. C.—Our correspondent is the best judge in such a question.

THE RESIDENCE CONDITION OF BRITISH MEDICAL GRADUATION.

To the Editor of THE LANCET.

SIR,—Whilst commending the leading article in a late number of your journal upon the sale of foreign degrees to men who have neither knowledge nor fitness in any way to hold them, and indeed to those who have passed through no curriculum at all, and who have given no proof of their competency to undertake the onerous and responsible duties which they assume to fulfil, I wish through you to bring home to the authorities in this kingdom another and most important phase of this question.

How is it that the registered practitioners of this country are hopelessly and for ever excluded from all possibility of obtaining degrees at home by an iniquitous combination on the part of the Universities to exact the residence clauses from men of five, ten, fifteen, or twenty years' standing in the profession? Such requirement, in plain language, simply means robbery and ruin to the registered practitioner who seeks such honours. For what man of any standing could leave his practice for one or two years without being both robbed in the price of his degree and ruined in his prospects in life? The attitude of our Universities to these hard-working men is simply disgraceful. Practically it is this: Our degrees are reserved for youths, whose time is of so little value that they can employ it in no better way than in too many cases in a useless residence, whose experience is nil, and whose theoretical knowledge may have been got up for the occasion, to vanish again as quickly. If men of position and ripened knowledge need degrees, they must submit to insult, robbery, and ruin; and by sacrificing their positions, which have cost large sums of money and half a life's labour to acquire, they may have them; and after this, as a practical and experienced man I doubt whether these Universities would extend a helping hand to their unfortunate graduates who were perishing with hunger beneath their windows. Such is life. Degrees at the price of ruin are to be despised and shunned, and hence the rapid increase of foreign ones. People cannot be expected to give £5 for a pennyworth of apples. I cannot get even £1 or 10s. for a 2s. 6d. bottle of medicine. The principle is the same. If the Universities of Great Britain cannot take other qualifications, position, and standing, say of five or ten years, in place of their residence clauses, and trust to examination alone in the case of such men, they ought to be disfranchised and superseded by those who can.

Take my own case, which is a type of hundreds more. I hold the three London qualifications; I have been nearly twenty years in practice; my character is unstained; my means ample to sustain the dignity of any degree; and my knowledge, theoretical and practical, would far surpass that of any youth turned out of any University, and yet no degree can I have without being ruined. Hundreds of us must seek degrees from abroad, and stand upon our legal rights. Once upon the Medical Register, upon any other qualification we can assume the foreign degrees in the face of the Medical Council with impunity; they can do nothing, since we have complied with all required of us by law in being placed upon that Register.

If you wish to avoid foreign degrees, abolish the residence clauses of Universities at home in the case of registered medical men of five years' standing, throw open the examinations to such men, and a national stimulus will be given men to work, general good will be done, and foreign degrees will be very little heard of.

Yours &c.,

November, 1875. OMEGA.

M.D.—The question was one of urgency, not turning upon the wages, or their relation to the weekly wages of the agricultural class—a question of starvation and of life and death. We maintain that there is decided absurdity in not giving absolute powers of medical relief in such a case to the medical officer.

Mr. Morgan.—It would be contrary to our custom to make such an announcement, except under very special circumstances.

THE REGISTRAR-GENERAL AND THE NOMENCLATURE OF DISEASES.

To the Editor of THE LANCET.

SIR,—It would probably be interesting to many of your readers besides myself to know the evidence and the authority upon which it is stated "that the sixteen deaths (since July 17th), attributed to small-pox in London, have all been fatal cases of *varicella*." A similar statement was made in the Registrar-General's Return some weeks ago with reference to an isolated case of death from small-pox appearing in that week's Return, and it surprised me that the medical man (who must have been able to identify himself as having certified it) did not attempt to justify his diagnosis.

I am, Sir, your obedient servant,

W. W. LEADAM, M.D.

Gloucester-terrace, Hyde-park, Nov. 27th, 1875.

*** The Registrar-General, in his classification of diseases, is under the necessity of condensing the thousand diseases enumerated in the nosology of the College of Physicians, and accordingly they are returned under rather more than a hundred headings in the publications of the Registrar-General. In this condensed classification, deaths from varicella have been returned under the same heading as those from variola. Hence the sixteen fatal cases of varicella in London between the 17th July and the 27th November were classed with small-pox, and it became necessary to explain that they were deaths from varicella. We are informed that after the end of this year deaths from varicella will be classed with "other zymotic diseases," instead of with small-pox, as hitherto.—ED. L.

OPHTHALMOLOGY.

A DEBATE of great interest to oculists is now going on before the Academy of Medicine of Paris. On the one hand, it is contended that alterations of vision, such as strabismus, myopia, &c., are owing, according to one camp (M. Jules Guérin at the head), to muscular retraction. He considers the disturbance of sight as an effect or consequence of the retraction of the muscles of the eye, just as club-foot is the consequence of the retraction of the muscles of the leg. M. Guérin thus maintains that strabismus is, to use his own forcible expression, the club-foot of the eye. (It should be noted that M. Guérin has been for many years a distinguished orthopædist.) His adversaries (M. Giraud-Teulon, a scientific ophthalmologist, at the head) contend, physiologically, that in the phenomena of accommodation there is neither change of curve in the cornea or in the connexions of the lens, nor alteration in the muscles of the eye. They, in fact, hold that the phenomena are owing to changes of form of the surfaces of the lens, which changes depend on the contraction of the ciliary muscle. They consider myopia and strabismus, etiologically, as the expression and the result of certain changes in refraction. M. Guérin answers that these changes of refraction are secondary effects of strabismus and myopia, and that both are dependent on muscular retraction. Again, M. Giraud-Teulon's school consider, pathologically, myopia, amblyopia, astigmatism, &c., as distinct and separate entities; whilst their opponents say that these anomalies are all connected together, and may simply be explained by muscular retraction. Practically, says M. Guérin, modern oculists have no resource but glasses; whilst he relies on the division of the retracted muscles. Thus we have, on the one hand, oculists and opticians; and, on the other, physiologists and surgeons. M. Guérin considers himself as the leader of the latter.

Captain Bedford Pim.—We cannot exchange.

PRESERVATION OF VACCINE LYMPH IN CAPILLARY TUBES.

To the Editor of THE LANCET.

SIR,—Of the different methods of storing vaccine lymph, that of Dr. Husband in his capillary tubes is for many purposes, especially the revaccination of large numbers of people, undoubtedly the best; but in my hands it is subject to the one great objection, that occasionally after filling a tube you are unable to blow out the contents; and I wish to ask my brother vaccinators, through the medium of your widespread and influential journal, whether they have ever met with the same result, and are able to offer an explanation of its cause.

Dr. Husband, in his Instructions for the use of his tubes, states that "if you delay the sealing process too long, more than five or ten minutes perhaps, the lymph within the tube is apt from evaporation to become adherent, especially if it be more than ordinarily viscid, and it cannot afterwards be blown out"; but the coagulation to which I refer is not due to delay in the sealing, for it takes place instantly. I have long been in the habit, in arm-to-arm vaccinations at my station, of picking up the lymph from the opened vesicles by means of a tube, and then blowing it out on to the lancet; my reasons for adopting this plan being that by so doing you get the lymph perfectly pure, free from epithelial scales, pus-globules, or blood-discs; you avoid all tearing of the vesicles; and you are able to collect lymph from several different vesicles if the supply be small, a matter of great difficulty with a lancet; and this setting in the tube takes place in the few seconds that elapse between the picking up and blowing out, and consequently before the application of any heat to seal the ends. I have found this coagulation occur most frequently in lymph collected from typical vesicles—viz., those free from areolæ on the eight day, or from those somewhat retarded in their development. It is not nearly so frequent if the vesicles be full and plump, or the arm slightly inflamed; doubtless, because in the latter case the lymph is more limpid. By taking a tube that has set as above described, and breaking off an end so as just to include a small portion of the contents, you can draw out a fine thread or hair of coagulated lymph or serum; the remainder can then be blown out, and by using this for vaccination you generally (although not with certainty) obtain good results. I have microscopically examined several of these threads, and in *every case at present* found a minute trace of blood, possibly only three or four blood-discs, invisible to the naked eye, and never suspected until revealed by the microscope—for, of course, all visible blood is carefully avoided; and I think that this may offer the explanation that the coagulation is due to the serum of the blood inadvertently taken up.

I remain, Sir, yours truly,

Greenwich, Nov. 29th, 1875. J. P. PURVIS, Public Vaccinator.

J. H. B.—1. Bradbury and Evans, Whitefriars; or Chambers, Paternoster-row.—2. Nothing recent.—3. Churchill, New Burlington-street.

Mr. Mayer.—We fear our correspondent attaches an undue importance to the matter.

THE CORPUS LUTEUM.

To the Editor of THE LANCET.

SIR,—Allow me to say a few words on the corpus luteum. In the case-book of the Bristol Asylum I found the following details entered by my distinguished predecessor, Dr. Benham:—"Patient, A. B., epileptic, admitted before the age of puberty; died during menstruation, a considerable time after. At the post-mortem her hymen was found entire, and a perfect corpus luteum in one of her ovaries." In 1851 Dr. Letheby read a paper before the Royal Society, in which he described two cases in every respect similar to the one recorded by Dr. Benham. Many years ago in Edinburgh a lamp-lighter killed his childless wife, and in her ovary a true corpus luteum was found. From these four interesting cases I infer that true corpora lutea are found in the ovaries of both impregnated women and virgins, but oftener in the former than in the latter; that when found in the virgins they have died menstruating; and that at present we are as ignorant as to the cause which produces at one time a true and at another a false corpus luteum, as we are of what produces at one time a male and at another a female child.

Yours faithfully,

HANMER DICKSON,
Late Assistant Medical Superintendent,
Nelson-square, S.E., Dec. 2nd, 1875. Bristol Asylum.

"EARTH TO EARTH."

A NEW kind of receptacle for the dead has been introduced by the London Necropolis Company. The object had in view in its construction is the same as that contemplated by Mr. Seymour Haden in his suggestion of the use of wicker-work—viz., to hasten dissolution. The new coffins are made of compressed pulp, held together by wooden fillets, look very much like ordinary coffins, and are as substantial till consigned to the earth. Then a change rapidly ensues, the damp soon affecting the pulp, which softens and falls away, leaving the earth to act upon the body.

Mrs. A. M. Nolan (Preston) will perceive that her subject has received attention.

THE SANITARY ASPECTS OF THE SACRAMENTS.

To the Editor of THE LANCET.

SIR,—The laws of health are necessary to the well-being of mankind in all the relations of life, and there is no station too exalted and no office too sacred to be independent of these laws.

With this exordium I desire to point out to the medical profession the duty that devolves upon them to instruct the church in sanitary matters. Already much has been accomplished in respect of burial of the dead; but there is one subject that laymen shrink from discussing—viz., the sanitary aspects of the sacraments, especially of the supper. Practitioners of medicine may well object to the early appearance at church of a woman and her infant, through which cause many lives are lost, still they have the power to restrain their patients from precipitancy of action; but as respects the other sacrament they are powerless.

The sanitary evil that ought to be abated is the use in common of one cup. There is danger in this use of communication of mouth disease. The usages of society would have long since swept away this common use of one vessel but for the dread that man feels for meddling with sacred rites.

I reiterate "there is no office too sacred to be independent of the laws of health." I am, Sir, your obedient servant,

Rochester, Dec. 4th, 1875. FREDERICK JAMES BROWN, M.D.

Alpha.—The matter should admit of the most complete and easy adjustment. A. having practically declined to go, as requested, to see his patient, B. was perfectly right in going. B. would have done well to have taken an early opportunity of seeing A. to explain and receive explanations; but neither his not doing so nor his taking charge of the case gives any justification of the words used by A., which should be simply withdrawn. Strong adjectives, such as those used by A., should be reserved for very different cases. At the same time we can readily believe that they were the expression of a temporary irritation, and not of any permanent opinion. B. is justified in asking for their withdrawal.

Mr. Adams Parker.—Very soon.

A Constant Reader, (Brussels.)—14, Cockspur-street.

A CAUTION TO GIVERS OF TESTIMONIALS.

To the Editor of THE LANCET.

SIR,—In a moment of weakness I unfortunately wrote a letter on behalf of an old pupil at King's College, whom I remembered years ago as a respectable person, and who assured me he was in distress, mainly through the effects of an injury. This letter was granted by me for the express purpose of an application to the Medical Benevolent Fund.

I find that the individual in question has made extensive use of this letter for begging purposes, and has annoyed a great number of old King's men, and my medical friends in this neighbourhood especially. I regret exceedingly that I should have been the means of this annoyance, and I take this step of writing to you for the purpose of putting them on their guard, and thus making all the reparation in my power for the annoyance I have caused them by my act of indiscretion.

Yours obediently,

Wimpole-street, December, 1875. HENRY SMITH.

E. D. Y.—Our correspondent should, to say the least, have received intimation of the change from the patient's friends, who should have been instructed as to their duty in this matter by the family doctor. Possibly he gave such instructions.

IMPROVED TRUSS.

To the Editor of THE LANCET.

SIR,—In your journal of to-day's date, under the heading of "New Inventions," appears an improved truss with ball-and-socket joint, which allows the pad to be placed in any position. We beg to say that neither principle nor general construction of the truss referred is *new*. The *ball-and-socket* principle, with screw adjustment to fix the pad at any angle, was patented on the 28th of August, 1874, No. 2947, and we purchased the patent right of the said inventor. At the Leeds Exhibition this year one of the trusses referred to has been exhibited by us. We likewise enclose the patent specification for your inspection, in which you will find the *ball-and-socket* principle, which can be fixed at any angle, is claimed by the inventor.

We much regret having to trespass on your valuable space; but can scarcely allow the truss to be called a new invention, the same having been anticipated at least fifteen months ago.

We remain, Sir, your obedient servants,

West Smithfield, Dec. 4th, 1875. ARNOLD AND SONS.

THE TREATMENT OF RINGWORM.

To the Editor of THE LANCET.

SIR,—I beg to inform Dr. Welsh, through the medium of your columns, that I have at present a case of ringworm under my care, in which I have for five weeks persistently used iodine in the form which he recommends, but without success. I have since tried sulphur &c., and am now, by the advice of a medical friend, applying petroleum, the result of which remains to be seen.

Your obedient servant,

Claughton, Cheshire, Dec. 5th, 1875. J. FOURNESS BRICE, M.D.

ULCERATED NIPPLES.

M. LEGROUX (*Annales de Gynécologie*, Nov. 1875) advises the following treatment:—Spread with a camel-hair brush a layer of elastic collodion around the nipple, in a radius of an inch or more; a piece of gold-beater's skin should then be placed over the nipple and collodion, taking care to make a few holes with a pin over the part of the gold-beater's skin which covers the nipple, so as to allow the milk to ooze through. No collodion should be spread on the nipple itself, as some pain might thereby be occasioned. By the rapid evaporation of the ether the collodion dries up, and the gold-beater's skin adheres. The nipple is then more or less pressed down by the latter, which in drying becomes tense. When the child is to be nursed, the end of the nipple should be wetted with a little water. The gold-beater's skin which covers it becomes soft and supple, allows the nipple to swell, and protects the ulcers and fissures from the strain of suction. The mother or wet-nurse thus suffers no pain, and the ulcers heal in a few days.

THE paper of *Mr. S. J. Knott* shall be published at a very early date.

Mr. Nankivell is thanked.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—Pray allow me to correct two important errors in your report of the proceedings of the Medical Society of London in the last number of your journal, p. 804. I did not say, as reported, "that worms were never introduced into the system by vegetables." I said that tapeworms in man were never so introduced, the author of the paper, Dr. Brunton, having stated "that they sometimes were." In the epidemic sore-throat the glands of the "*back*" of the neck were never affected, as stated in your journal.

Yours obediently,

Beaufort-street, Chelsea, Dec. 6th, 1875. EDWARDS CRISP.

J. A.—The subject has been noticed before. Our correspondent should refer the circular to the Bodies whose diplomas the person in question holds, and ask them if they can do anything in the matter. We shall be glad to have the replies.

TROUSSEAU'S COMPRESSOR.

To the Editor of THE LANCET.

SIR,—I was much interested in the report of the surgical cases in the Cashel Union, described by Mr. Laffan in your last issue. Would you allow me space to ask him where "Trousseau's compressor" may be obtained.

I am, Sir, yours &c.,

Liverpool, Dec. 3rd, 1875. W. MACFIE CAMPBELL, M.D.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir H. Thompson, London; Prof. Attfield, London; Mr. H. Smith, London; Mr. C. Heath, London; Mr. Barwell, London; Mr. Bond, London; Dr. Garrod, London; Dr. A. Meadows, London; Mr. Morgan, London; Mr. Greenwood, Liverpool; Mr. Barker, Blackburn; Mr. Blackford, Cannock; Dr. Elkington, Ontario; Mr. Frowde, London; Mr. R. P. White, Dublin; Mr. Clouting, Thetford; Dr. Pritchard, London; Dr. Rivington, London; Dr. Duncan, London; Mr. Grace, St. Andrews; Mr. Rogers, Ottawa; Dr. Campbell, Liverpool; Messrs. Mart and Co., London; Dr. F. Robinson, London; Mr. Dickson, London; Mr. R. Nelson, Gosport; Dr. Brown, Rochester; Dr. Farquharson, London; Mr. Larkin, London; Mrs. Baines, London; Mr. Macnamara, London; Mr. Ingpen, London; Dr. B. Sanderson, London; Messrs. Arnold and Sons, London; Mr. J. W. Groves, London; Mr. Bunting, Tottenham; Mr. Brown, Uppingham; Mr. A. Parker, Birmingham; Mr. A. W. Nankivell, Chatham; Messrs. Young and Postans; Mrs. Nolan, Preston; Dr. E. Crisp, Chelsea; Mr. Donnelly, London; Mr. Bodine, Trenton, New Jersey; Mr. Spurway, Paignton; Mr. Ogilvie, Edinburgh; Mr. C. Young, Bridgwater; Dr. Knott, London; Dr. Brice, Claughton; Mr. Norton, Leeds; Mr. Philip, Caterham; Dr. Anderson, Middlesborough; Mr. Leitch, Silloth; Dr. Mayer, London; Mr. R. Hook; Mr. Pim, London; Dr. E. Watson, Glasgow; Mr. Braidwood, Birkenhead; Mr. Scott, London; Dr. Hurd-Wood, Great Bardfield; Mr. Gould, Liverpool; Dr. Thornley, Leicester; Mr. Wall, Cambridge; Mr. Cappe, Brookwood Asylum; Mr. Skrimshire, Abergavenny; Dr. de Chaumont, Southampton; Dr. Crowther, Luddenden; The Registrar-General of Edinburgh; Anti-Monopolist; Y. S., Old Subscriber; Chirurgeon; S. L.; Surgeon; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Candotti, Queensland; Messrs. Levy and Co., Dundee; Mr. McGregor, Widnes; Mr. James, Cwm Avon; Mr. Thorne, La Motte; Mr. Blount, London; Dr. Adam, Bebington; Mr. Miller, South Brent; Mr. Johnson, Bedford; Mr. Janson, Darlington; Mr. Williams, Kingsland; Mr. W. Anderson, St. Andrews; Mr. Roper, Blaxhall; Mr. Fox, London; Medicus, Selkirk; D., London; Medicus; H. E. B., Pontypool; F. M., Twickenham; J. C. H.; G. S.; T. E. J., Bradford; B. C.; Medicus, Bradford; X. T.; A Student; J. H.; Theta; F., Lancaster; A. W., London; B. B.; A. S.; Douceur.

Western Morning News, Hastings Observer, Western Daily Mercury, Cork Constitution, Birmingham Morning News, Newcastle Chronicle, Manchester Guardian, Isle of Man Times, Huddersfield Chronicle, Hereford Times, North British Daily Mail, Lincoln Gazette, Indian Medical Gazette, Metropolitan, Croydon Advertiser, Liverpool Post, Surrey Advertiser, East London Observer, Dublin General Advertiser, and *Glasgow Herald* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments.)

THE LANCET OFFICE, DEC. 9TH, 1875.

Date.		Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Dec.	3	29·82	N.E.	...	32	...	36	30	0·29	Overcast
"	4	29·83	N.W.	...	30	...	33	28	...	Foggy
"	5	30·03	N.E.	...	32	...	33	31	...	Overcast
"	6	30·11	N.E.	...	31	...	34	26	0·25	Snowing
"	7	30·42	E.	...	31	...	36	29	...	Overcast
"	8	30·41	N.E.	35	36	...	39	30	...	Overcast
"	9	30·41	N.	35	37	...	...	34	...	Overcast

Medical Diary for the ensuing Week.

Monday, Dec. 13.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Henry Lawson will exhibit M. Hayem's new mode of estimating the Amount of Blood-globules.—Mr. Alfred Freer, "On a Case of Impalement, with Post-mortem results four and a half years afterwards."

Tuesday, Dec. 14.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8. P.M. Ballot.—8½ P.M. Mr. Marsh, "On a Case of Abdominal Section for Intussusception in an Infant."—Dr. Fagge and Mr. Howse, "On a Case of Abdominal Section for Intussusception in an Adult."—Mr. Hutchinson, "On a Case of Operation for Intussusception into the Colon."

Wednesday, Dec. 15.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Dec. 16.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Dec. 17.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Mr. Henry Davis, "On a Larval Cirripede."—Mr. John E. Ingpen, "On the Measurement of Angular Aperture."—(No meeting on Dec. 24th).
MEDICAL MICROSCOPICAL SOCIETY.—8 P.M. Dr. U. Pritchard, "On a new form of Freezing Microtome."—Mr. J. Needham: Specimens.

Saturday, Dec. 18.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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